

## **TOOLS AND RESOURCES DEVELOPMENT FUND: CALL 2.**

### **Support for Development of Bioinformatic Tools and Computational Approaches to the Biosciences**

**Submission Deadline: 12<sup>th</sup> January 2012, 16:00**

#### **Contacts:**

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Peer review and administration queries: Chris Hurne

#### **Summary**

BBSRC's Tools and Resources Development Fund (TRDF) aims *to pump prime the next generation of tools, technologies and resources that will be required by bioscience researchers in scientific areas within BBSRC's remit*. It is anticipated that successful grants will not exceed £120K and a fast-track, light touch peer review process will operate to enable researchers to respond rapidly to emerging challenges and opportunities. The 2011 call will proceed in two phases. **This is the second call, supporting Bioinformatics Tools and Computational Approaches**. Details of the areas supported are described below. Call 1 was launched earlier this year. Both calls will each have an indicative budget in the region of £1.5M, subject to the quality of the proposals received.

#### **Scope**

This call of the TRDF is intended to support small or short-duration, pump-priming (pilot) projects that enable excellent bioscience. The TRDF aims to encourage proposals that develop novel software tools, technologies and computational methods which address research challenges within the BBSRC remit and could, in the long term, underpin BBSRC Strategic Priorities and the wider biosciences. It is expected that proposals will involve multidisciplinary approaches and it is important that TRDF proposals demonstrate appropriate collaborative connections, and relevance to the generation of important new biological knowledge.

It is anticipated that grants of up to £120K<sup>[1]</sup> will be made. Proposals for projects should be between 6 and 18 months duration, although community networks to develop standards could be supported for up to 3 years.

Different types of 'enabling' proposal are eligible for consideration under this call of the TRDF

- New approaches to research data analysis and interpretation in the biological sciences, including development of software tools and algorithms. Of particular interest will be proposals addressing challenges arising from emerging new types of data and proposals addressing problems associated with known data handling (e.g. next generation sequencing)
- New frameworks for research data curation, data sharing, and data re-use/re-purposing in the biological sciences, including embedding data citation mechanisms (e.g. persistent identifiers for datasets within research workflows) and novel data management planning (DMP) implementations (e.g. integration of DMP tools within research workflows)
- Community approaches to the sharing of research data including the development of standards (this could include coordinating UK input into international standards development activities)

- Approaches designed to exploit the latest computational technology to further biological research, to facilitate for example, the use of (a) cloud computing approaches; (b) high performance computing architectures or (c) GPGPU technology<sup>1</sup>

Please contact BBSRC if you are unsure whether your proposal fits within the remit of the TRDF.

## Exclusions

The following areas are excluded from the second call of TRDF:

- Applications which are not technology or methods focused;
- Applications where the end users of the bioinformatic or computational tools will be applying the technology to a challenge outside the BBSRC remit;
- Generic 'platform' informatics or computational approaches in the physical sciences;
- Novel technology development, focusing on tools and instrumentation. Development of these technologies is within the scope of the first call of the TRDF.
- Applications not within the specified proposal areas or not meeting the specified expectations on project scale (including cost and duration). Such applications should be submitted to the responsive mode or another appropriate funding scheme.

As noted above, this call is intended to support the development of bioinformatics, computational biology software or algorithm development, including data sharing. If a submitted application does not fit the remit of the TRDF it will be rejected at an early stage. Applicants are therefore advised to contact BBSRC to discuss potential project concepts.

## Eligibility

This call for proposals is open to all institutions normally eligible for BBSRC managed-mode calls, which includes HEIs, Research Council Institutes and Independent Research Organisations (IROs) approved by BBSRC. For the categories of eligible organisations see BBSRC Research Grants Guide (Section 2) and for the list of IROs see the RCUK eligibility guidance. Applicants must be eligible for BBSRC funding. Details of the eligibility criteria can be found in the BBSRC Research Grants Guide (Section 3).

## Submission Deadline

The deadline for submission of proposals is **16:00** on **12<sup>th</sup> January 2012**.

## Fast-Track, Light Touch Assessment

BBSRC reserves the right to reject proposals, without reference to peer review, which are deemed to fall outside the remit and scope (including financial scope) of this call. Applicants are strongly advised to contact the research councils if they are unsure whether their proposal would be suitable for the call.

Proposals that fit the remit of the call will then be accessed through a single stage, fast-track panel assessment process. The streamlined nature of the assessment will use a broadly-based, multi-disciplinary panel with appropriate expertise.

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<sup>1</sup> Applicants may wish to apply to use the GPGPU testbed at HECToR, the UK national supercomputer <http://www.hector.ac.uk/support/documentation/guides/gpgpu/>.

**PLEASE NOTE: Proposals will be assessed only by the expert panel. Written reports from additional referees will not be obtained. The Panel will evaluate the proposals against the Criteria for Assessment (see below) and provide the funders with a recommended rank-ordered list of proposals based on the details contained within the case for support. Applicants should therefore ensure that sufficient details of their expertise and track record, proposed project, approaches and methods are provided within the case for support to enable the proposal to be assessed by scientists with relevant but not necessarily specialist expertise**

**Applicants will receive post-panel feedback on unsuccessful proposals. Details of how to request this will be provided in due course, and once the panel decisions have been made.**

## **Peer Review**

The Expert Panel will be composed of representatives from the BBSRC core committee and pool membership, plus members with expertise that covers scientific areas as required by the nature of the submissions.

The assessment of proposals will reflect the scope of the fund and will be assessed against the following criteria:

- Scientific excellence
- Strategic relevance
- Industrial and stakeholder relevance
- Economic and social impact
- Timeliness and promise
- Cost effectiveness
- Staff training potential

In addition, assessors will be asked to take into account the scope of the TRDF as set out above, including the potential utility and novelty of the proposed tool/technology.

## **Complementary funding mechanisms**

The TRDF is a small grants scheme and is not suitable for proposals where the cost to the BBSRC is greater than £120K. The TRDF complements responsive mode, which has four committee areas:

- Committee A: Animal systems, health and well being
- Committee B: Plants, microbes, food and sustainability
- Committee C: Genes, development and STEM approaches to biology
- Committee D: Molecules, cells and industrial biotechnology

Applications are advised against under resourcing a project, more suitable for responsive mode, and submitting it to the TRDF. Experience has shown that proposals of this nature are inevitably unsuccessful.

## **Awarded Grants**

Grants arising from previous calls for the Tools and Resources Development Fund can be viewed at: [www.bbsrc.ac.uk](http://www.bbsrc.ac.uk) (grants on the web).

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[\[1\]](#) This figure refers to the BBSRC contribution to the project, i.e. 80% of the full economic cost