

## **Life Science Research Using the Human Spaceflight Analogue 'Bed Rest' - UK (BBSRC) specific information**

The Biotechnology and Biological Sciences Research Council has agreed to contribute to the European Space Agency's 'Life Science Research Using the Human Spaceflight Analogue - Bed Rest' Announcement of Opportunity by providing support for innovative, collaborative research proposals.

The BBSRC will invest up to a total of £3 million to support the UK components of applications submitted to this call and will work closely with the UK Space Agency to coordinate this activity.

For full details of the call and application process, please refer to the European Space Agency's website:

[http://www.esa.int/Our\\_Activities/Human\\_Spaceflight/Human\\_Spaceflight\\_Research/Call\\_for\\_Life\\_Science\\_Research\\_Using\\_The\\_Human\\_Spaceflight\\_Analogue\\_Bed\\_Rest](http://www.esa.int/Our_Activities/Human_Spaceflight/Human_Spaceflight_Research/Call_for_Life_Science_Research_Using_The_Human_Spaceflight_Analogue_Bed_Rest)

### **Background**

1. The UK Space Agency (UKSA), BBSRC and MRC with support from the British Society for Research on Ageing held a workshop entitled, 'Research in Space Environments: What we can learn from microgravity and inactivity for a sedentary and ageing population' on 25 September 2012, to assess the potential benefit to the UK of joining the European Space Agency's Life and Physical Sciences programme (ELIPS) with particular focus on research on ageing and inactivity. The programme, presentations and full report from the workshop can be viewed at: <http://www.bis.gov.uk/ukspaceagency/what-we-do/exploring-the-universe/missions-and-programmes/microgravity-science/events-reviews-and-publications>
2. In November 2012, the UKSA announced that the UK would join ELIPS and invest £12.4M in this long-running programme to exploit the unique environment of space for fundamental and applied science in health, biology, materials and physics. Benefits of joining this programme include insights into the human ageing process and new lightweight materials for jet engines.
3. UKSA and BBSRC held a second workshop entitled, 'Research on Ageing Using Bedrest Facilities: New Opportunities in the ELIPS Programme' on 24 April 2013, to provide further information about the bedrest facilities, e.g. how they are managed, how ESA defines Announcements of Opportunity and selects experiments, and how UK researchers might get involved. The programme can be viewed at: <http://www.bbsrc.ac.uk/news/events/1304-ageing-using-bedrest-facilities.aspx>

### **Selection criteria**

4. All applications must be submitted to the European Space Agency (ESA) and will be reviewed by the ESA. BBSRC will consider providing support to applications submitted to the ESA under this call, if those applications:
  - Contain UK elements
  - Address the BBSRC remit and eligibility criteria (see below)
  - Are favourably reviewed through the ESA evaluation and selection procedures

## Eligibility

5. All UK applicants must be eligible for BBSRC support as set out in the [BBSRC Research Grants Guide](#) (standard responsive mode eligibility rules apply).
6. To be eligible for BBSRC co-funding, the UK component of applications must:
  - Contain a biological science UK component
  - Include one or more UK investigator
  - Fall within BBSRC remit
  - Address our [Ageing-Lifelong Health and Wellbeing](#) strategic priority area
7. International collaborative proposals are particularly encouraged, although it should be noted that BBSRC cannot provide funding for international co-investigators and their costs would have to be sought from their appropriate national funding body. Please refer to our [grants guide](#) for further information.

## Funding

8. The costs related to the bed rest facility and subjects are covered by ESA. Investigator-related costs are not sponsored by ESA and should be sought from national funding agencies, such as the UKSA and BBSRC.
9. BBSRC will support UK researchers, in the biology of ageing field, to participate in the ESA call for bed rest experiments. The UK element of a proposal should include any costs normally eligible for BBSRC support and are subject to the current requirements on Full Economic Costing as set out in the [BBSRC Research Grants Guide](#). Please read all relevant sections of the BBSRC Research Funding Guide before putting together your application.

## How to apply

9. Potential UK applicants are strongly advised to contact BBSRC prior to the application and submission process to ensure eligibility and remit criteria have been met.
10. **A letter of intent and application must be submitted to the European Space Agency (ESA)** as specified in the Announcement of Opportunity (AO-13-BR). The applications will be assessed through the ESA peer review process. For more information visit the [ESA website](#)
11. A copy of the Letter of Intent (submitted to ESA as specified in the call) must also be submitted to BBSRC ([bbsrcbedrest@bbsrc.ac.uk](mailto:bbsrcbedrest@bbsrc.ac.uk)) by **5pm on 4 November 2014**, with additional information (up to one side of A4) containing:
  - The names of all UK applicants
  - A brief description of the research aims and summary of the UK component of the proposed project
12. The UK principal investigator is required to complete a Je-S form, but the form **SHOULD NOT** be submitted electronically to the BBSRC at this stage. Applicants should generate a standard proposal proforma using the following instructions:
  - a. Log in to your Je-S account  
From the left hand menu, select **Documents**  
Under functions on the Main Menu, select **Create New Document**  
In the Add New Document screen - **Select Council BBSRC**  
Select document type **Standard Proposal**  
Select scheme **Small Grants**

Select Call / Type Mode **UK Partner Funding**  
Select **Create Document**

- b. Only the costings for the UK component of the project should be entered onto the Je-S Form and are subject to the current requirements on Full Economic Costing as described in the [BBSRC Grants Guide](#)
  - c. Applicants do not need to complete the following document data when developing this Je-S document:
    - Classifications
    - Ethical Information
    - Case for support
    - Justification of resources
    - Pathways to Impact
  - d. All other 'Document data' sections of the Document Menu will need to be completed if relevant to the application, including the **Impact Summary** and **Academic Beneficiary** sections. Please note, applicants should select the 'blank' choice in the **Mode** field in **Project Details** section. This is a blank space at the top of the menu above the listed schemes. Applicants should not select any of the other schemes
  - e. Travel costs: As this is a collaborative proposal BBSRC would anticipate that appropriate travel costs will be requested to cover attendance at the required investigator meetings associated with the bed rest study.
  - f. PhD students are not funded as part of a standard research proposal
  - g. Applicants should also prepare CVs for investigators and researchers; these should be in PDF format and follow the BBSRC CV guidance as detailed in the [BBSRC Grants Guide](#)
  - h. Once all relevant details have been completed, the **Document Menu** option 'Create Document for Printing' (in Document Import / Export section) should be selected. On clicking this link, the 'Adobe Portable Document Format (PDF)' print format should be selected within the pop-up window, and the resultant downloaded/emailed file should be saved locally.
  - i. The completed PDF documents (Je-S proforma and CVs) should then be emailed to [bbsrcbedrest@bbsrc.ac.uk](mailto:bbsrcbedrest@bbsrc.ac.uk) by **5pm on 13<sup>th</sup> December 2013**. These will be checked for eligibility, fit to BBSRC remit and strategic priority area. A letter of support will be issued to the UK applicant and must be included as a supplementary document in the ESA application.
  - j. The letter of support will state that in the event the application is successful, BBSRC will fund the UK component of the collaboration, subject to budget.
13. The UK Principal Investigator must send an electronic copy of the full submitted ESA application form to BBSRC ([bbsrcbedrest@bbsrc.ac.uk](mailto:bbsrcbedrest@bbsrc.ac.uk))

## Further information

14. For specific BBSRC scientific remit queries please use [bbsrcbedrest@bbsrc.ac.uk](mailto:bbsrcbedrest@bbsrc.ac.uk) or contact

Dr Louisa Jenkin, Strategy and Policy Manager – Bioscience for Health Sector  
+44 (0)1793 413352

Dr Sarah Plowman, Strategy and Policy Officer - Bioscience for Health Sector  
+44 (0)1793 442196

15. For specific UK queries about the Best Rest Study or ELIPS contact:

Dr Andrew Kuh, National Exploration and Microgravity Programme Manager, UK Space Agency  
[andrew.kuh@ukspaceagency.bis.gsi.gov.uk](mailto:andrew.kuh@ukspaceagency.bis.gsi.gov.uk)  
+44 (0)1793 418081