BBSRC AND BRAZIL

- **BBSRC regards Brazil as a priority country for future collaborative activity**
- **There are number of complimentary mechanisms to encourage both bottom-up collaborations and partnerships in areas of strategic importance to BBSRC**
- **BBSRC also encourages UK - Brazil partnerships through external mechanisms and through our global travel schemes**
- **BBSRC currently has collaborative agreements with FAPESP, CNPq and EMBRAPA**

BBSRC support for facilitating international collaboration with Brazil

BBSRC's International Relations Unit (IRU) strives to enhance BBSRC's influence and involvement at the forefront of international science, to exploit international funding opportunities in the interests of BBSRC's scientific community and to capitalise on international links, both at policy and scientific levels. It achieves this through a number of mechanisms.

BBSRC interactions with Brazil include visits and scoping studies to Brazil and welcoming Brazilian researchers and policy makers to the UK. In addition to two general schemes that can be utilized for promoting links with Brazil, BBSRC also has two specific schemes to promote longer term collaborative activity with Brazil (described below) and utilizes the RCUK-FAPESP lead agreement to facilitate joint research.

Full details of BBSRC international activities are on the BBSRC website at:
www.bbsrc.ac.uk/international

Visits
http://www.bbsrc.ac.uk/isis

BBSRC's International Scientific Interchange Scheme (ISIS) provides a mechanism for initiating and pump-priming collaborations, which allows BBSRC-supported scientists to explore potential international linkages and funding opportunities. Since 2000 BBSRC has spent over £60k to fund 14 visits involving Brazil, which encompassed a range of scientific areas including animal disease and pest management.

International Workshops
http://www.bbsrc.ac.uk/international_workshops

BBSRC sponsored workshops have created good international synergy, due to many having led to successful international research projects that have provided considerable added value to UK science. The workshops endeavor to match numbers of UK scientists with those in other countries, in order to identify areas of commonality and to explore the potential for international collaboration. The workshops also aim to provide some input to the formulation of policies in emerging areas of science and/or stimulate joint working with other countries that are active in a particular area. So far, BBSRC has funded 6 UK-Brazil workshops at a cost of £78,860. We expect to see an increase in applications for funds to conduct both visits to, and workshops with, Brazil in the coming years.

The Brazil Partnering Awards (BPA)
http://www.bbsrc.ac.uk/brazil

Partnerships with Brazil are producing benefits to the UK and the BBSRC community. It is therefore important that BBSRC continues to try to ensure that strong linkages are developed and sustained in the biosciences. The aim of the BBSRC-Brazil Partnering Scheme is to provide resources to leading BBSRC-supported research groups, which allow them to forge long-term relationships with Brazilian scientists in areas of research that are of direct relevance to BBSRC's current scientific strategy.

The primary objective of an award is to provide pump-priming, which enables UK research groups who are already funded by BBSRC to embark on creating links with Brazilian scientists. The overall aim is to build long-term partnerships that will ultimately lead to new collaborative research programmes. Awards cover activities such as exchanges of personnel, scoping studies and access to facilities and workshops. Similar BBSRC schemes operate with Japan, the US, India and China.

The 2011 and 2012 calls were run as a joint call with the National Council for Scientific and Technological Development (CNPq) of Brazil and encouraged applications in the area of Food Security and Industrial Biotechnology and Bioenergy. Unlike in previous years, the 2013 call was not run in collaboration with CNPq and welcomed applications in any area of BBSRC science. Typically, awards of up to £50K are made over a period of 4 years. Funding is normally used to support researchers travelling in either direction, although no prescribed mechanisms have been set as to how the award should be used. Preference is given to applications that propose the exchange of early-career researchers, workshops in emerging areas of science and for visits to access facilities that are not available in the UK.

RCUK - FAPESP Lead Agency Agreement
www.bbsrc.ac.uk/science/international/fapesp-joint-funding-research.aspx

Research Councils UK (RCUK) and the State of São Paulo Research Foundation (FAPESP) have signed a Memorandum of Understanding (MoU), in order to welcome, encourage and support collaborative applications that may cut across their national boundaries and involve international collaborative teams.

This groundbreaking MoU provides for a 'Lead Agency Agreement' whereby the relevant UK Research Council receives and assesses collaborative proposals from eligible applicants in both countries on behalf of both organisations. FAPESP nominated experts are involved with the peer review and decision making process throughout. This agreement removes the major obstacle of 'double jeopardy', where international joint research proposals are accepted by only one funding body.

FAPESP Pump-Priming Award (FAPPA)
www.bbsrc.ac.uk/fappa

To provide a springboard for applications under the above RCUK - FAPESP Lead agency agreement, BBSRC has developed the FAPESP Pump-Priming Award (FAPPA). Under this scheme, BBSRC funded researchers will be able to apply for funding of up to £35,000 over two years, in order to develop a collaboration with FAPESP funded partners and generate preliminary data to strengthen joint research applications. Support will be provided for collaborative activities such as visits and workshops. A maximum of 50% of the total value of each award is available for direct research costs. FAPESP will provide similar funding to Brazilian partners and applications will be assessed jointly between BBSRC and FAPESP.

EMBRAPA and LABEX
www.bbsrc.ac.uk/news/policy/2010/100331-pr-uk-brazil-partnership-embrapa-labex-launched.aspx

The Brazilian Agricultural Research Corporation (EMBRAPA) is a £400M agri-business and research arm of the Brazilian Government. EMBRAPA aims to provide solutions for sustainable agricultural development in Brazil through the creation and transfer of technologies. As part of its international strategy, EMBRAPA has extended its activities to the USA, Europe and Asia through its LABEX ("**lab**oratory **ex**terior") programme, placing experienced Brazilian research scientists in elite overseas institutions.

In March 2010, EMBRAPA established its first UK base at the BBSRC institute, Rothamsted Research. It aims to carry out state of the art research in a priority science area and to create new opportunities and links between UK and Brazilian scientists. This is not just within Rothamsted, but across other BBSRC Institutes and UK universities as well, connecting with the wider European Labex network.

Human Frontier Science Programme (HFSP)
www.hfsp.org

HFSP is an international programme which was initiated in 1989 and is supported by Australia, Canada, India, Japan, the Republic of Korea, New Zealand, Switzerland, USA and the EU. It promotes international collaboration through research grants and fellowships in the life sciences. The UK subscription to HFSP is currently £1.415m, split between the Medical Research Council (£1.097m) and BBSRC (£318k). Both Councils are represented on the HFSP Board of Trustees. HFSP continues to support UK and BBSRC-funded scientists by furthering collaborations, offering HFSP Fellowships and encouraging joint research projects.

Contacts

Eligibility and administrative queries about the Brazil Partnering Awards scheme should be addressed to:

Ms Sania Afzal
Assistant International Relations Manager
BBSRC
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Tel: +44 (0)1793 413364

Scientific queries about this scheme should be addressed to:

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Tel: +44 (0)1793 413340

PREVIOUS AWARDS:

2013

UK-Brazil Partnering Award for Developing New Aphid Resistance in Wheat
£48,000
UK Lead: Dr Michael Birkett, Rothamsted Research
Brazil Partners: Dr Paulo Valle da S Pereira, National Wheat Research Centre, EMBRAPA Brazilian Agricultural Research

Brazil Partnering Award: Population genetic diversity of wild birds and its influence on virus evolution and biology
£18,000
UK Lead: Prof. Paul Britton, Avian Viral Disease, The Pirbright Institute
Brazil Partners: Professor Clarice Arns, Institute of Biology, State University of Campinas (UNICAMP)

Characterisation and exploitation of novel antimicrobials within the rumen microbiota
£40,700
UK Lead: Dr Sharon Huws, IBERS, Aberystwyth University
Brazil Partners: Dr Hilario Mantovani, Animal Biology, Federal University of Vicosa

Brazil Partnering Award-Understanding the health benefits of bioactives in food
£50,000
UK Lead: Dr Paul Kroon, Food and Health, Institute of Food Research
Brazil Partners: Dr Regina Lago, EMBRAPA Brazilian Agricultural Research; Dr Ricardo Giordano, Biosciences, University of Sao Paulo

Towards an understanding of cytoskeletal dynamics: coupling systematic fly genetics with computational modeling
£16,500
UK Lead: Dr Andreas Prokop, Life Sciences, University of Manchester
Brazil Partners: Professor Carlos de Moura, LNCC Nat. Lab. of Scientific Computing

Impacts of sugar cane production in Brazil
£48,000
UK Lead: Professor Peter Smith, Inst of Biological and Environmental Sci, University of Aberdeen
Brazil Partners: Dr Marcelo Galdos, Brazilian Bioethanol Science & Tech. lab, Brazilian Cent. Res. Energy & Materials

Brazil Partnering Award: Influence of gut microbiota derived short chain fatty acids on intestinal immunity
£74,500
UK Lead: Dr Patrick VargaWeisz, Chromatin and Gene Expression, Babraham Institute
Brazil Partners: Professor Marco Vinolo, Institute of Biology, State University of Campinas (UNICAMP); Professor Marcelo Mori, Federal University of Sao Paulo; Professor Niels Camara, University of Sao Paulo

2012

Brazil Partnering Award: Data acquisition and training for –omics in food, fuel and fisheries research
£59,450
UK Lead Partner: Professor Alan Archibald, Roslin Institute, University of Edinburgh
Brazil Partners: Dr Benilton Carvalho, State University of Campinas; Dr Eduardo Tarazona Santos, Federal University of Minas Gerais; Professor Gabriel Fernandes, Universidade Catolica de Brasilia

Pre-breeding for durable resistance to rust diseases in hexaploid wheat
£38,340
UK Lead Partner: Dr Lesley Boyd, Centre for Research, National Institute of Agricultural Botany
Brazil Lead Partner: Dr Marcia Chaves, National Wheat Research Centre, EMBRAPA

Exploitation of related species for developing superior adapted wheat varieties
£46,000
UK Lead Partner: Dr Julie King, School of Biosciences, University of Nottingham
Brazil Lead Partner: Professor Antonio Costa de Oliveira, Federal University of Portal (UFPEL)

Brazil-Imperial College collaboration: small RNAs in *A. pleuropneumoniae* - from identification to application
£31,250
UK Lead Partner: Professor Paul Langford, Department of Medicine, Imperial College London
Brazil Lead Partners: Professor Denise Bazzolli, Federal University of Vicosa; Dr Cátia Klein, EMBRAPA

2011

Characterisation and exploitation of bacterial endophytes in C4 energy crops
£35,601
UK Lead Partner: Dr Kerrie Farrar, IBERS, Aberystwyth University
Brazil Lead Partner: Dr Heloiza Barbosa, Institute of Biomedical Sciences, University of São Paulo

UK-Brazil Partnering award for FMD Vaccine Selection and Matching
£48,001
UK Lead Partner: Dr Mana Mahapatra, Foot and Mouth Diseases Programme, Pirbright Institute
Brazil Lead Partner: Dr J Caetano, FMD Laboratory, National Laboratory of Synchrotron Light (LNLS)

ARIES-Brazil
£50,000
UK Lead Partner: Dr Caroline Relton, Institute of Human Genetics, Newcastle University
Brazil Lead Partner: Dr Bernardo Horta, Post Graduate Programme in Epidemiology

Brazil: Sustainable Soil Management for Improved Food Security & Bioenergy Delivery
£42,950
UK Lead Partner: Dr Sacha Mooney, Division of Agricultural and Environmental Science, University of
Nottingham.
Brazil Lead Partner: Professor Alvaro Pires da Silva, College of Agriculture, University of São Paulo

Brazil-UK Collaboration on Technologies for Wheat Improvement
£49,420
UK Lead Partner: Professor Martin Parry, Plant Science Division, Rothamsted Research
Brazil Lead Partner: Dr Walter Ribeiro, EMBRAPA

An International UK-Brazil Collaboration using Synchrotron Radiation Circular Dichroism Spectroscopy to Study Protein Structure and Function
£27,000
UK Lead Partner: Professor Bonnie Wallace, Department of Biological Sciences, Birkbeck College
Brazil Partner: Professor Ana de Araujo, Physics Institute of São Carlos, University of São Paulo

UK - Brazil partnership on the chemical ecology of crop-plant/rust-pathogen interactions for underpinning novel crop protection strategies
£30,000
UK Lead Partner: Dr Michael Birkett, Biological Chemistry Division, Rothamsted Research
Brazil Lead Partner: Dr Clara-Beatriz Hoffmann-Campo, Laboratory of Chemical Ecology, EMBRAPA

Brazil - Enhancing Fusarium head blight and brusone resistance through improved phenotyping and genotyping
£27,700
UK Lead Partner: Dr Paul Nicholson, Department of Disease and Stress Biology, John Innes Centre
Brazil Partner: Dr Jose Fernandes, Embrapa Headquarters, EMBRAPA

Brazil-UK: Supporting training and research in predictive microbiology, using ComBase and related software tools
£29,000
UK Lead Partner: Dr Jozsef Baranyi, Food Borne Bacterial Pathogens Programme, Institute of Food
Research
Brazil Lead Partner: Professor Bernadette Franco, University of Sao Paulo