BBSRC Fellowships
Overview

• What does BBSRC invest in?
• BBSRC fellowships; why and what
• Good fellowship proposals
• Other opportunities
What does BBSRC do?

Curiosity driven, frontier bioscience
Three major strategic priorities

Agriculture and food security

Industrial biotechnology and bioenergy

Bioscience for health

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Frontier Bioscience

• Pioneering, curiosity-driven research that can lead to far reaching discoveries is fundamental to BBSRC's mission

• Our frontier bioscience theme gives high priority to world-class discovery research that provides fundamental insights into biology

• We believe that frontier research is essential to ensure the UK remains a global leader and will continue to champion frontier bioscience in making the case for investment
New BBSRC strategy for Agriculture and Food Security

- Sustainable agricultural systems
- Crop and farmed animal health
- Food safety and nutrition
- Reducing waste
- Understanding and exploiting genomics
- Precision agriculture smart technologies
Industrial biotechnology and bioenergy (IBBE)

- Energy, industrial materials and biopharmaceuticals, developed and produced using biological processes, reducing dependency on fossil fuels and helping drive the UK bioeconomy
  - **Industrial Biotechnology**: Innovative approaches using biological resources and systems in manufacturing routes
  - **Bioenergy**: Liquid transport fuels, biogases and biologically generated electricity
  - Emphasis on **systems and synthetic** approaches
 Bioscience for health

• Driving advances in fundamental bioscience for better health across the life course, reducing the need for medical and social intervention
  – **Lifelong Health** – Maintain and develop health across the life course
  – **Nutrition and Health** – How nutrition affects health
  – **One Health** – Dedicated to improving lives of all species (human and animal)
  – **Biotechnology for Health** – New knowledge to advance regenerative biology and tissue engineering
What does BBSRC do?

Vision: ensuring the power of biology delivers a Healthy, Prosperous and Sustainable future

• Invest in world-class bioscience research in UK universities and institutes
• Support bioscience training and skills
• Drive the widest possible social and economic impact from our bioscience
• Promote public engagement with bioscience
Why Does BBSRC Invest In Fellowships?

Support outstanding scientists at key transition points in their research career

- Independent postdoctoral research
- Independent group
- Returning from a career break
- Developing a new business

www.bbsrc.ac.uk/about/reviews/consultations/1503-review-investing-in-fellowships/
Why Does BBSRC Invest In Fellowships?

• Identify the **research leaders** of tomorrow and support existing ones to **establish themselves**

• **Build cohorts** of excellent researchers and support their training
  – Kick-off meeting
  – Fellow’s Conference
  – Other activities
BBSRC Fellowships

- PhD viva
- Years of active research experience
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9

- Independent research in host lab
- Independent research group

Full details available on the BBSRC Fellowships webpage: www.bbsrc.ac.uk/fellowships
BBSRC Support for Independent Research

Are you a group leader (lecturer level position)?

- No
  - Do you have < 5 years active postdoc exp. & want to carry out your own project?
    - No
      - Discovery Fellowship
    - Yes
      - David Phillips Fellowship
  - Yes
    - Do you have < 3 years at lecturer level & have not received previous funding that includes PDRA costs?
      - Yes
        - New Investigator award
      - No
        - Responsive Mode
New Investigator Scheme

- Assists early-career researchers – newly employed university lecturers, lecturer level equivalent researchers / fellows to secure their first major element of research funding

- Applicants must not have received funding as a Principal Investigator that include Postdoctoral Research Assistant (PDRA) staff support costs

[www.bbsrc.ac.uk/funding/grants/new-investigator/]
Discovery Fellowship

Support for early career scientists with high potential to undertake independent research and gain leadership skills. Developing future leadership skills is key

- **Remit:** DFs can be in any area of BBSRC remit

- **Number, duration & value:** it is expected that around 10 will be awarded (3 year duration), up to £300k can be requested

- **Eligibility:**
  - Researchers with a maximum of 5 years of active postdoctoral research experience as of 30 November 2018
  - No restrictions on nationality
  - Supports flexible working

- **Call currently open** will close 9 May 2018

www.bbsrc.ac.uk/funding/filter/discovery-fellowships/
David Phillips Fellowship

Aimed at *outstanding bioscientists* in the early stage of their research careers who wish to establish themselves as independent researchers

- **Remit:** DPFs can be in *any area of BBSRC remit*

- **Number, duration & value:** it is expected that *up to 5 will be awarded (5 year duration)*, up to £1M can be requested

- **Eligibility:**
  - **Minimum** 3 years of active postdoctoral research
  - No restrictions on nationality
  - Supports flexible working

- **Call currently open will close 9 May 2018**

[www.bbsrc.ac.uk/funding/filter/david-phillips/](http://www.bbsrc.ac.uk/funding/filter/david-phillips/)
Training and mentoring are integral to BBSRC fellowships

- Career Development plan part of DF application
- Can use fellowship to attend training courses

- Expect fellows to receive mentoring within host institution
- Fellows enrolled on BBSRC mentorship programme
- Expected to consider both their development needs and those of their group members

www.bbsrc.ac.uk/skills/developing-careers/academic-mentoring/
How Are Fellowship Proposals Assessed?

- Proposal submitted
  - Office checks
- External expert peer review
  - Focused on the proposed science
- Committee E meeting 1: Sift stage
  - Selects candidates to invite for interview (aim to invite ~3x more people to interview than awards), uses referee reports
- Committee E meeting 2: Interview stage
Assessment Criteria: Project, Person, Research Environment

Project
• Scientific **quality** of the proposed research, its **timeliness** and how it will **advance the field** and establish your **niche**

Person
• Independence and **leadership**
• **Track record**
  ➢ e.g. number and quality of **publications** (accounting for field), **funding** acquired, **supervision** experience (For the DPF: demonstrating an upward trajectory is key. Less important for the DF)

• How the fellowship will **advance your career**
  ➢ DF: Mandatory **Career Development Plan** to demonstrate thought given to future **career** and identified **training needs**

Research Environment
• **Scientific environment** of the host department and institute
• **Career** and professional development **support**
• **Research support**
Good Fellowship Applications

• Are proposing a scientifically **excellent** and **realistic research project** that can be completed within the time available

• Demonstrate **independence**
  – and for the DPF an **upward career trajectory**

• Include evidence of **scientific leadership**

• Show consideration of **career development**

• Are aware of the “**bigger picture**”

• Show **support** from the host
Good Fellowship Applications

Independence
- Not just carrying on a PI’s project
- Evidence that you have or are developing different skills to those in your current group
- Bring complementary skills that are not present in your proposed host lab / institution
- Collaborations set up independently of PI
- Generation of preliminary data

Scientific leadership
- Invitations to talk
- Poster prizes and other awards
- Collaborations
- Media requests / appearances
- Involvement in large collaborative projects
Good Fellowship Applications

Career development
- How is the fellowship going to boost your career?
- Be upfront about weaknesses and state how the Fellowship will help you address them
- A CDP helps by clearly showing where you want to be, how you will get there and what training is needed to achieve this

Your project and the bigger picture
- How will the project complement the field, avoid competing with potential competitors, and develop your niche
- How will the project be used to generate data that allows you to establish a scientific identity > have a long term research vision
- Be aware of the potential wider and long-term impacts of the research
Raise Your Profile

Apply for small awards
• Travel grants, prizes, equipment etc.
• Undergraduate placement students

Network
• Attend conferences
• Talks at other institutions
• Use social media

Researcher Co-Investigator status
• Postdoc who has made a substantial, recognised contribution to the formulation and development of a project and who will be engaged in the ensuing research

More information in the BBSRC Grants guide section 3.8
www.bbsrc.ac.uk/documents/grants-guide/
Common Reasons For Discovery Fellowship Rejection

- Not demonstrating **leadership potential**
- **Independence not clear** - just more of what your PI is currently doing
- **Insufficient** thought given to career development needs
- Lack of awareness regarding **potential competitors**
Common Reasons For David Phillips Fellowship Rejection

• Project **unrealistic** or the proposal is **poorly thought-through**

• Independence not clear

• **Publication record:**
  – **Insufficient** first author **papers** (where appropriate)
  – Papers are in **low impact** journals (accounting for field)
Feedback For Successful DF Applications

“The Panel was pleased that the candidate was demonstrating independence in the project including forming beneficial collaborations with other labs to help them maximise successful output from the work”

“The candidate had already demonstrated independence and leadership through a number of prizes and talks”

“The Panel praised the fact that the candidate had a clear vision of their career development”

“The Panel was pleased to see that the candidate had clear scientific goals, including clear targets and questions that needed to be addressed as part of the project”

“The applicant demonstrated good knowledge of the overall rational of the proposed research and of why and how the science would have a longer term scientific and social impact”

“The applicant had clear and realistic long-term career goals”
Feedback For Successful DPF Applications

“Aware of how their work differed from others in the field and spoke clearly about how they would establish their independence and visibility”

“The choice of host institution was considered good and the support from the RO was noted”

“Clearly an independent scientist with leadership potential”

“They had given thought to risk management and the development of the work if they encountered problems”

“The candidate had a clear vision of their career development and had a realistic approach to the management and development of a research group”

“They had a mature approach to developing their research group and articulated a clear plan for integrating themselves within the research environment at the RO while developing a distinct research profile of their own”
Feedback For Unsuccessful DF Applications

“The scientific aspects of the proposal were strong but the leadership and career development components did not appear to have been given careful consideration.”

“The Panel felt that the candidate struggled to answer questions relating to their plans for career development.”

“It was felt that the candidate lacked vision regarding scientific leadership and how their research fits into the bigger long-term picture.”

“The candidate gave insufficient consideration to how the fellowship would assist them in becoming an independent researcher.”

“The candidate did not appear to have given sufficient thought to their future research and career plans. It was unclear to the Panel where the science would take them and how they would ensure that they derived maximum benefit from the fellowship.”
Feedback For Unsuccessful DPF Applications

“Did not clearly demonstrate that they had considered the career development and mentoring of members of their group”

“How they would develop and manage their research group was somewhat vague”

“Did not convince the Panel that they had a clear vision already in place for career progression. They were also unable to demonstrate how they would develop their independence at the host institution”

“Publication strategy lacked ambition and they did not take into account the mentoring and career plans of their staff”

“Did not sufficiently highlight the “big question” that they were hoping to address and which would set them apart as a leader in the field”

“Concern that the level of staff support requested in the proposal was insufficient to realise the potential of the research”

“Proposed project would not generate enough work to support the staff requested from the start of the fellowship”
Applying: Before You Start

• **Read** all the guidance

• Check the **remit** of your proposal!

• Contact **remit@bbsrc.ac.uk** for clarification on eligibility, and **postdoc.fellowships@bbsrc.ac.uk** for general Fellowship questions

• If in doubt: **Ask!**
Other Fellowships

Daphne Jackson Trust Fellowship

- To aid those on a career break for family, caring or health reason to return to research
- Normally 2-3 years part-time; includes extensive training programme
- [www.daphnejackson.org](http://www.daphnejackson.org)

Enterprise Fellowship

- To support development of a new business, building on previously funded BBSRC research
- Delivered by the Royal Society of Edinburgh
- [www.bbsrc.ac.uk/fellowships](http://www.bbsrc.ac.uk/fellowships)
Support for Postdocs

Postdoc vision statement
• www.bbsrc.ac.uk/skills/developing-careers/postdoctoral-vision

Mentoring
• BBSRC review of best practice
• www.bbsrc.ac.uk/skills/developing-careers/academic-mentoring/
Why Is A Career Development Plan Important?

Survey of ~8500 postdocs in USA found that:

“postdocs who plan their experience with their advisors at the outset of their appointments fare substantially better than those who do not”

• Structured oversight and transferable skills training make a big difference: key to this are Career Development Plans

• Postdocs with a CDP:
  – Were much less likely (~40%) to be dissatisfied
  – Were much less likely (~30%) to have conflicts
  – Submitted ~14% more papers for publication (After controlling for field, institution, demographics)

Improving the Postdoctoral Experience: An Empirical Approach, G. Davis, 2006
Questions?

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