Building Leadership Strategy at EPSRC

Strategy and Future Plans

Current Funding Opportunities and Process

Q&A
Building Leadership Strategy at EPSRC

Strategy and Future Plans

Current Funding Opportunities and Process

Q&A
For the UK to be the best place in the world to research, discover and innovate

One Vision

Research and Discover

Research and Innovate

Two Goals

Balancing Capability

Building Leadership

Accelerating Impact

Three Strategies
Building Leadership

Our 2015 Strategic plan states EPSRC will

*Nurture the next generation of skilled researchers and innovators and provide the knowledge and skills vital to a healthy sustainable and prosperous society.*

Aims for the next Delivery Plan are to

- Increase diversity in our research community.
- Invest in innovation through people
- Support a balanced portfolio of routes to doctoral training
- Develop an active approach to the management of early careers, in partnership with universities.
- Explore postdoctoral career development
Equality and Diversity

We aim to increase diversity in our research community to draw on the widest pool of talented researchers.

Current specific EPSRC support for E&D:
- Flexible working and support on all of our grants
- Daphne Jackson Trust Fellowships – for researchers who have had a career break of 2 or more years
- Royal Society Dorothy Hodgkin Fellowships – for researchers who require a flexible working pattern

EPSRC, alongside all Research Councils, have published diversity data on grant and fellowship applications, awards and success rates by gender, age and ethnicity with an analysis of HESA data to estimate the diversity profile of the academic population.
Equality and Diversity

- Work towards the E&D target set by EPSRC Council (by 2020);
  - 30% target by gender for our Council, Strategic Advisory Network, College and Strategic Advisory Teams.

- RCUK has developed a joint action plan on equality and diversity which has been submitted to the Minister for Universities and Science.

- Current EPSRC activities focus on working in partnership, reviewing our peer review processes and improving our understanding of our diversity data.

- Council has recently approved plans to further explore
  - Appropriate positive action
  - Partnership agreements with Universities
Innovation Through People – (Strategic Advisory Network Workstream)

How do we make a **step change** in our contribution to the innovation system through the development and support of people?

**Areas initially being Explored**

- Innovation Thought Leaders
- Knowledge Exchange Experts
- RAs For the Innovation System
- Mobility
- Innovation Environments
Building Leadership Strategy at EPSRC

Strategy and Future Plans

Current Funding Opportunities and Process

Q&A
Key Engineering Interventions 2011-2015

2011/2012 – New Fellowship funding approach
6 Priority areas within Engineering

2013 - Series of activities to increase the awareness of fellowship opportunities

2014 - Early Career Researcher Roadshows
- EPSRC/HEI Meetings
- Engineering Leaders of the Future (ELF)
- University level engagement and briefings

2013 - 4 new priority areas
Engineering for Sustainability Resilience
Microsystems
Synthetic Biology

March 2014 – Fellowships for Growth - £13 Million awarded
Advanced Materials, SynBio, RAS

2015 - New priority areas
Advanced Materials
RAS Control Engineering
New Delivery Plan 2016-2020

Where are we now? - Reflective period

- Taking stock of activities over the last delivery plan – evaluating positive interventions
- Working closely with the Building Leaders team, the Strategic Advisory Teams, and the community to develop a future plan.

Objective to define and develop

- key principles,
- desired outcomes
- and priorities

for people support within engineering over the next delivery plan

- Early Career researcher support is a priority for EPSRC
- We need to develop our thinking of how we can better integrate our support within the context of our new CSR settlement.
Early Career Forum

- To be set up alongside the existing Strategic Advisory Team.
- 10-15 members all at an Early Career stage
- Initial recruitment will be constructed from applicants to the Early Career position on the Engineering Strategic Advisory Team

Objective of the group:

- To work alongside the SAT to provide an alternative perspective from our Early Career Researchers into strategic plans for the theme
- To support Early Career Engagement at a theme level
Funding Streams

What do I want to do with my grant?

Predominately research  Develop as a future leader

Is it your first application?

Yes  No

Fellowship

What is the main focus of the application?

First Grant

Research  Other

Standard Grant  Network Grant

Workshop Grant  Travel Grant
The Peer Review Process

1. Proposal
   - Portfolio Manager
   - Reviewers
   - Applicant
     - Nominated
   - EPSRC College
     - Unsupportive
     - Supportive

2. Prioritisation Panel
   - Applicants Response
   - Rank Order
     - Theme Lead
     - Budget from Council
     - Final Funding Decision

3. Rejection
# The Peer Review Process

## Criterion: Research Quality
- Does the proposed research address novel and innovative research? Is it ambitious and adventurous? Is the proposed methodology appropriate?

## Criterion: National Importance
- How important for the UK is the proposed research? Have the applicants described the benefits of conducting the research? Would the research bring a valuable contribution to the existing ICT research landscape?

## Criterion: Impact
- Are the proposed impact activities appropriate? Have the applicants considered user engagement? Where appropriate have aspects of responsible innovation been considered?

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<table>
<thead>
<tr>
<th>Criterion</th>
<th>Scope</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Quality</td>
<td>Does the proposed research address novel and innovative research? Is it ambitious and adventurous? Is the proposed methodology appropriate?</td>
<td>Primary</td>
</tr>
<tr>
<td>National Importance</td>
<td>How important for the UK is the proposed research? Have the applicants described the benefits of conducting the research? Would the research bring a valuable contribution to the existing ICT research landscape?</td>
<td>Secondary (Major)</td>
</tr>
<tr>
<td>Impact</td>
<td>Are the proposed impact activities appropriate? Have the applicants considered user engagement? Where appropriate have aspects of responsible innovation been considered?</td>
<td>Secondary</td>
</tr>
</tbody>
</table>

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**Proposal** → **Prioritisation** → **Proposal** → **Final Funding Decision**

**Applicant** → **Nominated** → **Criterion Scope Priority**

- **Research**
  - **Quality**
- **National**
- **Importance**
- **Impact**

**Unsupportive** → **Rejection**

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**EPSRC College**

**from Council**
If you have any concerns over the process…

Advisory streams;

- EPSRC Website
- JeS Helpdesk
- University Research Office
- Contact a Portfolio Manager
First Grant
First Grants

- Funding aimed to kick start an academic career
- **Are not a ‘must’,** can go straight to Standard Grant proposals

- Maximum award of £125K
- Maximum length of grant is 2 years

**Eligibility criteria**

- First time applying to EPSRC as a PI
- Within 36 months of starting your first academic position or your probationary period (whichever is longest)
- Be within 10 years of being awarded your PhD
- Hold an academic position which includes lecturing and administration alongside research
- **Unable to apply if:** You have applied as a PI to the EPSRC previously or hold an EPSRC Fellowship

**Exceptions**

- Applicants with unusual career patterns (part time working, break for illness or maternity leave) may still be eligible
- EPSRC Postdoctoral Fellows and unsuccessful Fellowship applicants may apply

These are **small, short** grants.
Fellowships
Research Grant/First Grant
- Support team led by PI (and CoI) for proposed research programme
- PI normally holds permanent academic position (fixed employees may be eligible)
- PI and CoI have many other duties in department next to research project

Fellowship
- **Personal award**: support to establish or develop future research leader and build her/his group
- Devote most of your time to your research programme and deliver your research vision
- Advocate EPS disciplines inside and outside of Academia
The EPSRC Fellowship framework: key features

- Allows for variations of career paths
  
  *it’s all about the person specification*

- There are generally no deadlines –
  - Most themes have two fellowship rounds per year operated through an open call.
  - Exceptions: specific calls (EPSRC calls webpage (e.g. Manufacturing, Energy, Quantum, Healthcare)

- Applications invited only in **specific priority areas** that are linked to our strategic priorities.

- More **flexible on the amount of time** a fellow dedicates to their fellowship (50-100% FTE), giving them the option of staying active within their department and/or part-time opportunity for care duties etc.

- Suite of resource packages to facilitate linkage with the best, creativity, while allowing them to build a group → applicants can apply for a package that best suits them.
Are YOU an ideal Fellowship candidate?

- Do you want to commit a significant amount of time to an **ambitious research** project of your own determination?

- Do you have the ambition of **building a team** around you to deliver your research vision? Do you have a plan about how to do this?

- Do you work flexibly? Might you be able to use a **flexible award** to work differently and create a step change in your career?

- Do you want to maintain other institutional commitments whilst focussing on your research?

- Would you be interested in doing more **public engagement** activities to communicate your science to a wider audience?
## Fellowship priority areas:

https://www.epsrc.ac.uk/skills/fellows/areas

<table>
<thead>
<tr>
<th>THEMATIC AREAS</th>
<th>POSTDOCTORAL</th>
<th>EARLY CAREER</th>
<th>ESTABLISHED CAREER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>Synthetic biology</td>
<td>Water Engineering</td>
<td>Water Engineering</td>
</tr>
<tr>
<td>Engineering for Sustainability and</td>
<td>Complex Fluids and Rheology</td>
<td>Complex Fluids and Rheology</td>
<td>Complex Fluids and Rheology</td>
</tr>
<tr>
<td>Resilience</td>
<td></td>
<td>Software development for novel Engineering research</td>
<td></td>
</tr>
<tr>
<td>Microsystems</td>
<td></td>
<td>Assistive technology, rehabilitation and musculoskeletal biomechanics</td>
<td>Assistive Technology, Rehabilitation and Musculoskeletal Biomechanics</td>
</tr>
<tr>
<td>Robotics and Autonomous Systems</td>
<td></td>
<td>Particle Technology</td>
<td>Particle Technology</td>
</tr>
<tr>
<td>(with ICT)</td>
<td></td>
<td>Synthetic biology</td>
<td>Synthetic biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engineering for Sustainability and Resilience</td>
<td>Engineering for Sustainability and Resilience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Microsystems</td>
<td>Microsystems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Materials Engineering</td>
<td>Advanced Materials Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control Engineering</td>
<td>Control Engineering</td>
</tr>
</tbody>
</table>

See website for other themes
Healthcare Fellowships

The Healthcare specific fellowships priorities were withdrawn from 1st Oct 2015

Fellowships that have a relevance to health are still accepted in priority areas across the organisation (19 at the latest count!)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Priority area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Economy</td>
<td>Advancing the Understanding and Development of the Internet of Things for the Digital Economy</td>
</tr>
<tr>
<td>Engineering</td>
<td>Advanced Materials Engineering</td>
</tr>
<tr>
<td></td>
<td>Assistive technology, rehabilitation and musculoskeletal biomechanics</td>
</tr>
<tr>
<td></td>
<td>Control Engineering</td>
</tr>
<tr>
<td></td>
<td>Microsystems</td>
</tr>
<tr>
<td></td>
<td>Performance and Inspection of Mechanical Structures and Systems</td>
</tr>
<tr>
<td></td>
<td>Robotics and Autonomous Systems (joint with ICT)</td>
</tr>
<tr>
<td></td>
<td>Software development for novel Engineering research</td>
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<tr>
<td></td>
<td>Synthetic Biology</td>
</tr>
<tr>
<td>ICT</td>
<td>Working Together</td>
</tr>
<tr>
<td>Manufacturing the Future</td>
<td>Scale up methodologies for novel manufacturing products and processes</td>
</tr>
<tr>
<td></td>
<td>Sustainable Feedstocks (e.g. biopharmaceuticals)</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td>Mathematical Aspects of Operational Research</td>
</tr>
<tr>
<td></td>
<td>New Connections from Mathematical Sciences</td>
</tr>
<tr>
<td></td>
<td>Statistics and Applied Probability</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>Analytical Science</td>
</tr>
<tr>
<td></td>
<td>Chemical Biology and Biological Chemistry</td>
</tr>
<tr>
<td></td>
<td>Grand Challenges - Understanding the Physics of Life</td>
</tr>
<tr>
<td>Across all themes</td>
<td>Complexity Science</td>
</tr>
</tbody>
</table>
EPSRC Fellowships - What can you apply for?

- EPSRC particularly wants to encourage applicants to request resources which will allow them to:
  - Build international research collaborations;
  - Move across disciplines and stimulate innovative approaches to collaborative research between and across disciplines;
  - Link with the best, either in an academic or industrial setting, e.g. spending time (up to 12 months) in alternative research environments recognised as centres of excellence or by inviting visiting researchers.
  - Maximise their creative potential
  - Engage with the public/media
The type of resources available is determined by the career stage under which you are applying.

<table>
<thead>
<tr>
<th>Resource Package</th>
<th>Postdoctoral</th>
<th>Early Career</th>
<th>Established Career</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>Up to 3 years</td>
<td>Up to 5 years</td>
<td>Up to 5 years</td>
</tr>
<tr>
<td>Salary</td>
<td>Up to 100% fte</td>
<td>Up to 100% fte</td>
<td>Up to 100% fte</td>
</tr>
<tr>
<td>Travel &amp; Subsistence</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Staff</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Visiting Researchers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment</td>
<td>Small equipment items</td>
<td>Yes – in line with current EPSRC guidelines for equipment</td>
<td>Yes – in line with current EPSRC guidelines for equipment</td>
</tr>
<tr>
<td>Consumables</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Public Communication Training</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Assessment criteria

- Full proposals will be sent out to expert peer review and will be assessed against:
  - Research quality
  - The candidate (including qualities and experience)
  - Importance
  - Research Environment
  - Impact
  - Resources and management
  - Fit to strategic priorities

- At prioritisation panel main focus is on assessing the science.
- At interview main focus is on assessing the individual.
The role of the Fellowship interview panel

- At **prioritisation panel** main focus is on assessing the **science**

- At **interview** main focus is on assessing the **individual** with reference to the **person specification** based on following competencies:
  - Research excellence
  - Setting the research agenda
  - Strategic vision
  - Profile and influence
  - Inspirational team leader
  - Communication and engagement skills
Documentation

- Proposal Cover Letter (up to 2 sides of A4) – for EPSRC to see only
- Case for Support (up to a maximum 9 sides of A4)
- Pathways to Impact (maximum 2 sides of A4)
- Applicant’s CV (maximum 2 sides of A4)
- Host Organisation Statement (maximum 2 sides of A4)
- Diagrammatic Work-plan (maximum 1 side of A4)
- Justification of Resources (maximum 2 sides of A4)
- List of Publications (no page limit)

Where applicable:
- Letters of Support from any project partners (no page limit)
Expectations of the host organisation

- **Integral** support to fellowship – from application stage; during award and beyond!

- Universities take ownership for pre-selecting most able candidates, ensuring they are aligned to priority area and assisting with fit to person specification.

- Accord fellows equivalent status to academic staff.

- Expected support – infrastructure; adequate office and lab space; a mentor where appropriate.

- Suitable career development procedures to support transitioning to next career stage.
EPSRC Peer Review College

- Peer Review is at the heart of EPSRC business
- EPSRC has a College of experts who provide independent peer review to inform its decisions
- The College is broadly designed to represent the community it serves
- Populated with enough expertise to provide Peer Review needs in each discipline
- Balanced pool of members in terms of breadth of knowledge, gender, experience, ethnic origin and geographic location
Refreshing EPSRC Peer Review College

- New delivery plan period
- Need to rebalanced pool of members in terms addressing equality and diversity

Call for Expression of Interest to join the Associate Peer Reviewer pool – closing date 10th May
https://www.epsrc.ac.uk/funding/calls/associatepeerreviewcollege/

- We encourage you to apply and get involved
- Application through the call and the smart survey
- Pass on the opportunity to project and research business partners