

Quick Reference

Please note that you must read the full Call document for guidance before submitting your proposal

EPSRC UKRI Innovation Fellowships

Call type: Invitation for Outlines

Closing date: 09 November 2017 at 16:00

Funding Available: Up to £38.9 million is available for this call. EPSRC expects to fund 65-85 Fellows. Additional funding of up to £1.6 million from AHRC, a minimum of £1 million from BBSRC and up to £0.4 million from ESRC will be available for research at specified interfaces.

How to apply: Outlines followed by invited full proposals and interviews.

Assessment Process: Outlines will be considered by a sift panel, invited full proposals will undergo postal peer review, followed by an interview panel stage.

Key Dates:

Activity	Date
Deadline for Outlines	09 November 2017
Deadline for Full Proposals	23 January 2017
Interview Panel	Week commencing 07 May 2018
Funding decision	Late May
Grant start date	June 2018

Additional information: This call is focussed towards innovative individuals in the early stages of their research career either in academia or industry, including, but not limited to: experienced postdoctoral researchers, those with a junior academic post or researchers within industry who wish to transition to academia. Duration of the fellowship will be a maximum of three years. Universities are expected to limit their submissions to their selected applicants in line with the numbers set out by EPSRC in Annex 1. However, this is an opportunity to enhance the diversity of our Fellowships community. All Universities submitting Fellowship proposals will need to send us the number of proposals they are expecting to submit together with the process used to ensure equality, diversity and inclusion by **12 October 2017**.

Contacts: EPSRC fellowship inbox: EPSRCfellowships@epsrc.ac.uk, Sarah Halliwell, Portfolio Manager. Email: sarah.halliwell@epsrc.ac.uk or telephone: 01793 44 4298 and Rebecca Williams, Portfolio Manager. Email: Rebecca.Williams@epsrc.ac.uk or telephone: 01793 44 4106.

EPSRC UKRI Innovation Fellowship

Call type: Invitation for outlines

Closing date: 09 November 2017 at 16:00

Related themes: Digital Economy, Energy, Engineering, Healthcare Technologies, ICT, LWEC, Manufacturing the Future, Mathematical Sciences, Physical Sciences, Quantum Technologies

Summary

This call will support EPSRC UKRI Innovation Fellowships for a period of up to three years. Some of these fellowships will be co-funded by AHRC, BBSRC or ESRC. The EPSRC UKRI Innovation Fellowship is for innovative individuals in the early stages of their research career either in academia or industry, including but not limited to: experienced postdoctoral researchers, those with a junior academic post or researchers within industry who wish to transition into academia.

The funding is to support fellows whose research can help to achieve the aims of the Industrial Strategy and will lead to either short or long-term economic benefit for the UK. EPSRC has identified a selection of priority areas from the Industrial Strategy that will be most relevant for engineering and physical sciences. As well as these areas, EPSRC would like to support excellent engineering and physical sciences research underpinning other areas of the Industrial Strategy and excellent research at specified interfaces with AHRC, BBSRC and ESRC.

In order to develop a productive relationship between industry and the research base, we expect all Innovation Fellowships to have planned collaboration with industry during the fellowship or to develop routes to Intellectual Property capture and/or commercialisation i.e. spin-out or start-up opportunities.

As with all EPSRC Early Career Fellowships, the aim of the award is to provide the recipient with the necessary support to establish themselves as a leader of the future. An Innovation Fellow should be able to articulate their research vision which is based on a creative and innovative idea and should have a clear idea of where they want to be at the end of the fellowship and how the fellowship will help them to get there. Throughout the fellowship, they can develop their team leadership abilities, engage with their research community and develop local, national and international networks. Fellows should act as an advocate for research and innovation in general and EPSRC and other partners in UKRI specifically.

In order to ensure that high quality applicants are funded, we are asking universities to facilitate the process by prioritising the applicants they support. EPSRC has provided an indicative quota for the number of proposals we expect to receive from each university, further information can be found in Annex 1. Universities who intend to support any Innovation Fellowship proposals should

submit an Intention to submit to buildingleadership@epsrc.ac.uk by 12 October 2017 in which they provide the number of proposals they intend to support and the process by which the applicants will be identified. Where it is intended that applications will be submitted at the interface with other Research Councils, please make this clear in the 'Intention to submit'. We would like universities to use this as an opportunity to enhance the diversity of our Fellowships community by outlining how their identification processes ensure equality, diversity and inclusion as set out in the RCUK's Statement of Expectations for Equality and Diversity. <http://www.rcuk.ac.uk/documents/skills/equalitystatement-pdf/>

For further information please refer to the Guidance for host organisations section on page 16.

Background

Skills form a key component of the UK government's 2017 Industrial Strategy, and the Green paper, January 2017, "Building Our Industrial Strategy" [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/611705/building-our-industrial-strategy-green-paper.pdf] highlighted core themes, challenges and opportunities in order to ensure that UK research continues to be world class. In response to this UKRI has developed a fellowship programme to be supported through the National Productivity Investment Fund. This is focussed towards early career researchers ensuring that this scheme is instrumental in building the pipeline of talent entering both industry and the research base. UKRI Innovation Fellowships will be a step change in the support provided by the Research Councils to the research leaders of the future enabling some of the UK's most talented researchers to undertake major new innovation oriented, intellectual endeavours of ambition and scale that they would not otherwise be able to pursue.

Much innovation occurs at the intersection of disciplines, this includes many research proposals that help to solve problems that are aligned with the industrial strategy. Therefore, priority areas for key engineering and physical sciences aligned research within the Industrial Strategy and interdisciplinary priority areas that support underpinning areas of the Industrial Strategy have been identified. This call will also support a new generation of interdisciplinary leaders who will be providing interdisciplinary answers to complex problems as well as addressing focused industry and sectoral needs, both in the short term and long term, to the social and economic benefit of the UK. These interdisciplinary fellows will be labelled as 'Interface Innovation Fellowships' to highlight the support EPSRC wishes to provide alongside other Research Councils, these potential fellows will be identified at the outline stage sift and may be co-funded by either AHRC, BBSRC or ESRC.

Together 'Innovation Fellowships' and 'Interface Innovation Fellowships' will nurture future leaders in both industry and the research base and promote greater mobility between them and ensure that a variety of UK industrial sectors have a supply of skilled researchers. The cohort of fellows will develop their leadership experience, entrepreneurial and enterprise skills in a crucial phase of their careers as they establish themselves and develop beyond post-doctoral and early career work.

The Government has confirmed it is investing £100 million to attract the brightest minds and highly-skilled researchers to the UK, through its new Ernest Rutherford Fund (<https://www.gov.uk/government/news/100-million-rutherford>)

[fund-to-attract-best-researchers-to-the-uk](#)). The Rutherford Fund will provide fellowships for early-career through to senior researchers, from both the developed world and emerging research powerhouses like India, China, Brazil and Mexico, helping to maintain the UK's position as a world-leader in science and research. As such, non-UK nationals who are awarded an Innovation Fellowship may be identified as Rutherford Fellows.

For more information about EPSRC's portfolio and strategies, see our website: <https://www.epsrc.ac.uk/research/ourportfolio/>

Applicants should read the guidance for Fellowships on the EPSRC website: <http://www.epsrc.ac.uk/skills/fellows/>

A **Fellowship** is a personal award and it enables you to devote most of your time and focus to the proposed research. A Fellowship is to position you and your research topic within the wider academic and industrial field, develop your leadership by establishing or extending your research group and act as an advocate for your discipline in general and the Research Councils specifically.

Aims and Scope

Innovation Fellowships are three-year research fellowship awards where the award holder undertakes a programme of research aligned with the objectives of the Industrial Strategy Green paper (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/611705/building-our-industrial-strategy-green-paper.pdf) working in collaboration with industry. The applicant should clearly describe how their proposal aligns to one or more of the priority areas listed below, these are further defined in **Annex 2**.

Applicants are also asked to identify how they will be collaborating and engaging with industry or are focussing on routes to IP capture and/or commercialisation i.e. if there is a prospect of spin-out or start-up company coming from the proposal.

We welcome proposals in the following priority areas:

- Robotics and artificial intelligence systems
- High Productivity Services through Specialised Artificial Intelligence
- Development and manufacture of batteries for the electrification of vehicles
- Digital manufacturing
- Quantum technologies
- Cheap and clean energy technologies
- Integrated and sustainable cities - including low energy buildings
- New approaches to data science

In addition to the areas above, we would like to support Fellowships leading excellent engineering and physical sciences research able to make a contribution

to other areas of the developing Industrial Strategy including space research, advanced sustainable agriculture, leading edge health care technologies and specific areas of interest to other Research Councils. Further information about the areas that are of interest to other councils and areas that sit at the interface of disciplines are available in Annex 2.

Funding available

£38.9 million is available for this call from EPSRC and it is expected to fund between 65-85 Innovation fellowships including Interface Innovation fellowships and Rutherford Fellowships as identified by EPSRC. Additional funding of up to £1.6 million from AHRC, a minimum of £1 million from BBSRC and £0.4 million from ESRC will be available to co-fund research at specified interfaces.

Proposals in-line with these priorities at the interface with NERC may also be considered by agreement before submission.

The Rutherford Fund announced in July 2017 aims to attract and retain international talent from from the developed world and from emerging research powerhouses such as India, China, Brazil and Mexico to the UK. As such, successful non-UK nationals who are awarded an Innovation Fellowship may be identified as Rutherford fellows.

The call is focussed on creative and challenging research whilst developing relationships within and outside of the research base by engaging with industry.

- Funding is for a maximum duration of three years (or an equivalent if held part-time).
- The Fellow is expected to request a package of resources appropriate for the aims of the Fellowship, the type of resources available is determined by the career stage under which you are applying see: <http://www.epsrc.ac.uk/skills/fellows/resources/>
- Staff time may be requested.
- The fellowship must start in June 2018 and no extensions will be given for delays in the appointment of staff. Therefore, when putting together the proposal, the recruitment time for staff required should be taken into consideration i.e. if it is estimated that it will take six months to recruit a PDRA then only 30 months of PDRA time should be requested. Only if there is a PDRA/staff member ready to start in June 2018 should you apply for the full 3 years (36 months) of time.

EPSRC will announce the awards in early June 2018 with all fellowships commencing in June 2018.

Equality, Diversity and Inclusion

The long term strength of the UK research base depends on harnessing all the available talent and the Research Councils have together developed the ambitious [RCUK Equality, Diversity and Inclusion Action Plan](#). EPSRC is committed to supporting the research community in the diverse ways a research career can be built with its investments. This includes career breaks, support for people with caring responsibilities, flexible working and alternative working patterns. With this in mind, EPSRC welcomes proposals from academics that job

share, have a part time contract or need flexible working arrangements. Please see our [Equality and Diversity webpages](#) for further information.

Equipment

Equipment costs under the OJEU limit are eligible under this call.

For more information on equipment funding, please see:

<https://www.epsrc.ac.uk/research/facilities/equipment/>

Consumables/equipment under £10,000 should be applied for under Directly Incurred Other costs as usual.

Eligibility

This call is aimed at innovative individuals in the early stages of their research career either in academia or industry, including but not limited to: experienced postdoctoral researchers, those with a junior academic post or researchers currently in industry who would wish to transition to academia. We would not typically expect applicants to qualify as an early career researcher if they hold a senior position.

Applicants are expected to hold a PhD by the start date of the fellowship or have equivalent experience. There are no eligibility rules based on years of post-doctoral experience or whether the applicant holds a permanent academic position.

Consideration will be given to applicants who have taken a non-standard career path after their primary degree. Proposals are also welcomed from candidates who wish to re-establish themselves after a career break or other period of absence from active research.

If applicants are employed part-time then they can apply for the Fellowship to be held part-time and extend pro-rata at the time of application.

There are no nationality restrictions imposed by EPSRC although the fellowship should be held at an eligible UK Higher Education Institution or eligible UK Independent Research Organisation. An intention of this programme is to attract global talent to the UK, so proposals from non-UK nationals are encouraged. EPSRC Early Career Fellows are eligible for a Tier 1 Exceptional Promise visa route which offers an accelerated visa route:

<http://www.rcuk.ac.uk/documents/documents/tier1guidance-pdf/>

You may only submit a full proposal for one EPSRC fellowship in any 12 month period so please consider carefully when you choose to submit your proposal. If you are rejected at the outline stage then you will still be eligible to apply for another EPSRC fellowship.

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide:

<http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/>

As this call is a targeted funding opportunity provided by EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to EPSRC is provided at: <http://www.rcuk.ac.uk/funding/eligibilityforrcs/>

How to apply

A three-stage application process will be used.

- **Stage 1 Outline proposal** - application details are described below.
- **Stage 2 Full proposal** - application details are described below. Those successful at the outline stage will be invited to submit a full proposal. No other proposals will be accepted. Any unsolicited proposals will be rejected.
- **Stage 3 Interview Panel**

Submitting an application

You should prepare and submit your proposal using the Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Outline Proposal'
- Scheme 'EPSRC Fellowship'
- On the Project Details page you should select the 'EPSRC RCUK Innovation Fellowships Outlines' call.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by **16:00 on 09 November 2017**.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<https://www.epsrc.ac.uk/funding/howtoapply/>) which should be consulted when preparing all proposals.

Guidance on writing an outline application

Applicants are asked to submit a Case for Support, CV, Justification of Resources and a supporting Host Organisation Statement (to be uploaded as 'Other attachment').

Reviewers will be asked to comment on the outline stage assessment criteria (p12). If the Host Organisation Statement does not address what has been requested (below) then the Outline proposal will be office rejected.

Outline Case for Support: (up to four sides of A4) Mandatory

The case for support should address the following areas:

- A brief explanation of the proposed research and how this fits into either the Industrial Strategy aligned areas relevant to EPSRC (as listed on page 4) or how the proposed research fits into one of the recognised interface

areas described in Annex 2. Definitions of all areas can be found in Annex 2. Applicants should identify which priority areas their proposal addresses.

- A brief explanation of why you feel the Innovation Fellowship is appropriate for you, what you personally hope to achieve and how it will transform your career.
- A brief explanation of how you demonstrate leadership potential and will act as an ambassador for science and research within academia an industry.
- How you have or will develop links with industry and how this will enable you to engage with industry throughout your career.

CV: (up to two sides of A4)

Please provide one CV, for the applicant only. The CV should be uploaded into Je-S as 'CV' attachment type.

Justification of resources: (up to two sides of A4).

'Other attachment' Statement from Host Organisation: (up to two sides of A4) Mandatory

Please provide a letter of support from the Pro Vice Chancellor of your Host Organisation to confirm that you were identified as an applicant for Innovation fellowship, your Host Organisation will have indicated how many proposals EPSRC will be receiving from them. This statement should be on University headed paper, should be dated, and should clearly detail how you were identified by the university and how this process fits with the organisation's equality, diversity and inclusion policy. If this is not included within your outline proposal then your proposal will be office rejected and will not go forward to the outline panel sift. This attachment will not be seen by peer review. A full Host Organisation Statement detailing the support you will receive from your university during your fellowship must be provided at the full proposal stage.

For advice on writing proposals see:

<https://www.epsrc.ac.uk/funding/howtoapply/preparing/>

Submitting your Full proposal application

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Fellowship Proposal'
- Scheme 'EPSRC Fellowship'
- On the Project Details page you should select the 'EPSRC RCUK Innovation Fellowships' call.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by **16:00 on 23 January 2018**.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<https://www.epsrc.ac.uk/funding/howtoapply/>) which should be consulted when preparing all proposals.

Guidance on writing a full application

The full proposal should consist of the following completed documents. Applicants are advised to consider the assessment criteria (page 12) and strategic drivers of the call, and to ensure that they address these in their proposal.

Application Cover Letter (up to 2 pages)

This letter will only be seen by EPSRC (or another relevant council if it falls into an interface area) and will not be sent to peer review. Outline the call priority area(s) which you believe your proposal addresses. The cover letter gives applicants the opportunity to express any other information they feel is relevant to their application or, if applicable, highlight anything that has been discussed with EPSRC staff beforehand, relevant to the application.

Case for support (up to nine sides of A4) comprising:

- **Track Record of Applicant (up to two sides of A4):** The applicant should submit a tailored track record which highlights their skills, expertise and experience. An explanation for why you have chosen your host organisation should be included.
- **Description of proposed research and its context,** ensuring that all the assessment criteria are addressed (page 13). The case for support should include the research hypothesis and objectives, as well as the programme and methodology.
- **National Importance:** further guidance on how to address National Importance within your proposal is also available on the EPSRC website <http://www.epsrc.ac.uk/funding/howtoapply/preparing/includingnationalimportance/>
- **Academic impact:** describe how your research would benefit national and international researchers in the field and related disciplines, and what will be done to ensure that they can benefit.

A statement on how the proposed research fits with the identified priority areas of the call.

Please refer to the assessment criteria within this call guidance document. For more details please read the general Case for support guidance <http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/caseforsupport/>

Pathways to impact document (up to two sides of A4)

The Pathways to Impact document, should describe the kinds of impact envisaged, how the proposed project will be managed to engage users and beneficiaries, and increase the likelihood of impacts, including (wherever appropriate):

- Methods for communication and engagement

- Collaboration and exploitation in the most effective and appropriate manner
- The applicant's track record in this area
- The resources required for these activities. Please ensure these are also captured in the financial summary and the Justification of Resources.

You are particularly encouraged to think about how public engagement activities may help you maximise the impact of your proposed research.

Detailed guidance on Pathways to Impact is available at <http://www.rcuk.ac.uk/ke/impacts/>

Applicant's CV (up to two sides of A4)

This should include:

- Your current contact details.
- Your employment history, listed in reverse order. Please start with your current employment and make sure that the title of your current post is clear.
- Your research history, listed in reverse order. The dates of any degrees obtained and the viva date for your PhD should be stated or equivalent experience explained.
- Track record of research and/or innovation funding or research positions.
- Any current teaching commitments.
- Any current administrative activities: examples may include editorial responsibilities, committee membership, team leadership etc.
- Other: examples may include invited talks, awards, prizes, memberships of professional bodies, membership and leadership of collaborations etc.

Host Organisation Statement (two sides of A4)

The Pro-Vice Chancellor of your host university must complete a statement in support of the proposal. At the outline stage they will have detailed the process by which you were identified as a potential Innovation Fellow and how this process incorporated equality, diversity and inclusion policies. At the full proposal stage this should detail;

- What support the applicant will receive during the fellowship period, for instance, mentoring, personal and career development opportunities, training;
- What the plans would be for the Fellow at the end of the fellowship period;
- Where equipment is requested, the statement should confirm any institutional contribution.

For details of what should be included in the Host Organisation Statement, please see:

<http://www.epsrc.ac.uk/skills/fellows/hostorganisationobligations/>.

Justification of the resources requested (up to two sides of A4).

Please ensure that all applicable costs requested on the Je-S form are justified in the JoR. Explain why the resources you have requested are required to undertake your research project and implementing the impact plan. You are recommended to follow the 'cost to the proposal' headings used in the application form. For more information please see: <http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/jor/>

Work plan (up to one side of A4)

Normally a schematic Gantt Chart, but you can use any technique to show how the elements of the Fellowship will flow together. Depending on the nature of the research proposed, this is not expected to be a detailed and fixed work plan for the full duration of the project.

Project partner letters of support (no page limit)

<http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/>

List of Publications (no page limit)

Further details on what to include can be found here:

<https://www.epsrc.ac.uk/skills/fellows/peerreviewprocess/howtoapply/#List of Publications>

Please note that this attachment must be uploaded for JeS to validate, therefore if you do not have any relevant publications please submit a dummy document.

Quotes/business case for equipment

<http://www.epsrc.ac.uk/research/facilities/equipment/>

Technical assessment (no page limit)

If you plan to use a major facility in your research, such as those funded centrally by EPSRC or a European facility, contact the facility before applying to EPSRC to check if your proposed research is feasible, and obtain a Technical Assessment if Je-S marks it as required.

Applicants should use the Ethical Information section on the Je-S form to demonstrate to peer reviewers that they have fully considered any ethical issues concerning the material they intend to use, the nature and choice, current public perceptions and attitudes towards the subject matter or research area. EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the Ethical Information section must be completed. If the research will involve human participation or the use of animals covered by the Animals (Scientific Procedures) Act 1986 it is recommended that applicants pay particular attention to the guidance highlighted below. EPSRC reserves the right to reject proposals prior to peer review if the Ethical Information sections are not completed correctly.

Further guidance on completing the Je-S form can be found at <https://je-s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInformation.htm>. Other relevant guidance includes: EPSRC's policy on animal use in research (<https://www.epsrc.ac.uk/about/standards/animalresearchpolicy/>) and

the Responsible Innovation Framework
(<https://www.epsrc.ac.uk/research/framework/>).

Please note that on submission to EPSRC **all** non-PDF documents uploaded onto Je-S are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

In addition, where non-standard fonts are present, and even though the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc.), the document is converted to PDF prior to attaching it to the proposal.

Additional documentation will not be accepted after the deadline. Please note that proposals not accompanied by the correct documentation will be rejected.

Assessment

Assessment process

A three-stage assessment process will be used. Where a proposal falls into an interface priority area, EPSRC will consult with the other Research Council to identify reviewers with interdisciplinary research assessment expertise.

Stage 1: Outline proposal

The outline bids will be considered by an external sift panel against the assessment criteria outline below. If successful, applicants will be invited to submit a full proposal. EPSRC reserve the right to apply additional selection criteria in the event of the call being so substantially oversubscribed as to be unmanageable as initially planned.

Stage 2: Invited Full Proposal

Full proposals will be sent out for expert postal peer review. Applicants will have the opportunity to reply to comments made by the reviewers. Any proposals without sufficiently supportive reviews will be rejected at this stage. The overall quality score will be heavily weighted towards the score from this stage of the process.

Stage 3: Interview Panel

Proposals with sufficiently high postal peer reviewer scores will go to interview in order to select the final successful applicants. Full details of the interview process will be sent to applicants successful at the full proposal stage.

Assessment criteria

Stage 1: Outline Proposal (assessed by an external panel)

The Outline proposals will be assessed on their eligibility, fit to the scope of the call and fit to the role of the Innovation Fellow. Specific considerations will include:

Remit: The proposal should fall in the remit of either the identified EPSRC priority areas aligned to the Industrial Strategy, or the recognised interface areas.

Quality

- The research and innovation you propose should have a high degree of novelty in comparison to the broader research context of the area internationally.
- Research ideas should be high quality, creative and truly innovative.
- The scientific merit, originality, technical feasibility, and relevance of the proposed program of research will be assessed.

The Applicant

Should show evidence of:

- Ability to deliver
- Ability to collaborate
- Research vision
- Leadership potential

Industrial Engagement: There should be evidence that the applicant can ensure a planned industrial collaboration will take place or they have the ability to develop routes to Intellectual Property capture and/or commercialisation i.e. through spin out or start-up opportunities.

Stage 2: Invited Full proposal

The full proposal will be assessed using the following criteria:

Research quality (primary criterion)

- The research and innovation you propose should have a high degree of novelty in comparison to the broader context of the area internationally.
- Research ideas should be high quality, creative and truly innovative.
- The scientific merit, originality, technical feasibility, and relevance of the proposed program of research and innovation.
- How the proposed programme of research will have a transformative effect on the research and innovation landscape.

The applicant (secondary criterion)

Can be described in four ways:

- Ability to deliver
- Ability to collaborate
- Research vision

- Leadership potential

As an early career researcher you should be able to show evidence of leadership in terms of leading and maximising the potential of a research team and also demonstrating potential to lead within the broader community and setting research agendas.

You should exhibit an ability to work broadly and across different interfaces, identifying and positioning yourself to take advantage of opportunities.

You can show potential to act as an ambassador and advocate for research and innovation and an ability to influence.

You must demonstrate excellent communications and interpersonal skills.

Importance (secondary criterion)

- Evidence of how the proposed research:
 - Contributes to, or helps maintain the health of other research disciplines
 - Contributes to addressing key UK societal challenges,
 - Contributes to current or future UK economic success and/or enables future development of key emerging industry.
- Meets national strategic needs by establishing or maintaining a unique world leading research activity (including areas of niche capability).
- Fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC portfolio and our [Research Area strategies](#) and EPSRC's [Delivery Plan](#).

Research Environment (secondary criterion)

- Justification of choice of host organisation and collaborations.
- Appropriate level of support and commitment to your career as evidenced through the Host Organisation Statement.
- You should be able to demonstrate a strong vision for how your team and requested resources will deliver the research proposed in the application, and how you will develop a team in the first place.

Fit to Strategic Priorities (secondary criterion)

- Evidence that the proposed research and innovation is aligned to the identified EPSRC Industrial Strategy aligned priority areas within this call (page 4, defined in Annex 2) or to priority areas at the interface of disciplines (defined in Annex 2).

Impact (secondary criterion)

- Industry engagement: Planned collaboration with industry, government or public sector must be included in the proposal and can occur at any point within the fellowship. This also includes the development of routes to

Intellectual Property capture and/or commercialisation i.e. spin-out or start-up opportunities.

- What is the social and/ or economic benefit for the UK either in the short term or the long term?
- Who else may benefit from the research, how they may benefit and what will be done to ensure they have the opportunity to benefit.
- What pathways to impact activities will be undertaken?
- How will the candidate use their experience and networks to ensure the above four points.

Resources and Management (secondary criterion)

- You must be able to justify the planning and project management of the proposed research programme, including the management of any staff requested.
- You must be able to demonstrate that the resources requested in this application are justified and appropriate for delivering the proposed research.
- You should identify the main risks and put contingencies in place.

Stage 3: Interview

Research quality (primary criterion)

Technical questions: Reviewers comments and your response may be questioned but the research quality score will be weighted in favour of the postal peer review scores.

The following criteria should be assessed in terms of the person specification (<https://www.epsrc.ac.uk/skills/fellows/peerreviewprocess/whocanapply/>):

- **The applicant** (secondary criterion)
- **Importance** (secondary criterion)
- **Research and Innovation Environment** (secondary criterion)
- **Fit to Strategic Priorities** (secondary criterion)
- **Impact** (secondary criterion)
- **Resources and Management** (secondary criterion)

Moving forward

If you are invited to submit a full proposal, the deadline will be 23 January 2018 at 16:00. Full Submissions to this call will count towards the Repeatedly Unsuccessful Applicants Policy. Further information about the policy can be found at: <https://www.epsrc.ac.uk/funding/howtoapply/basics/resubpol/rua/>

Guidance for reviewers

EPSRC fellowship scheme guidance for reviewers can be found here:

<https://www.epsrc.ac.uk/funding/assessmentprocess/review/formsandguidances/fellowships/>

Any additions/changes are listed below:

EXC1: Quality/Excellence – no change

APP5: Applicant – additions to 'leadership potential'

Leadership Potential – Given that the applicant is at an early career stage please comment on their potential (and the expected timescale) for them becoming an international research leader. As well as their ability as a team leader and ambassador for science and research.

PAT1: Pathways to Impact – addition

Industry engagement: Planned collaboration with industry, government or public sector must be included in the proposal and can occur at any point within the fellowship. This also includes routes to IP capture and/or commercialisation i.e. spin-out or start-up opportunities.

IMP1: Importance – no change

RES5: Resources and Management – no change

CALL2: Specific call criterion – change (reviewer comments in Proposal assessment section)

Research Environment – no change

Fit to Strategic Priorities – changed

Comment on evidence that the proposed research is aligned to the identified Industrial Strategy aligned priority areas or to the Interface priority areas, as defined within the Call guidance.

Evidence of how the proposed research contributes to addressing identified challenges of the Industrial Strategy Green Paper.

Guidance for host organisations

Universities are expected to limit their submissions to their top applicants in line with the numbers set out by EPSRC, more information can be found in Annex 1.

Host organisations must submit an Intention to submit to buildingleadership@epsrc.ac.uk by **12 October 2017**. Within this Intention to submit statement we ask you to provide us with the number of Outline proposals you expect to submit to the Outline stage, and to detail the process by which you are identifying Fellowship applicants. Where applications will be specifically identified for interface areas with other councils, please make this clear in the 'Intention to submit'. We particularly want to know how your process will use this as an opportunity to enhance equality, diversity and inclusion in line with the

RCUK Statement of Expectations for Equality and Diversity and the Equality, Diversity and Inclusion section within this call (page 5).

<http://www.rcuk.ac.uk/documents/skills/equalitystatement-pdf/>

As guidance we would like you to address the following questions:

- How are you improving diversity and inclusion through recruiting?
- How might you support career progression and flexible working where necessary?
- How will your institution's ED&I policies be taken into consideration?
- What steps are you taking to mitigate against unconscious bias in the selection of Fellowship applicants in terms of gender or any other protected characteristics and more generally?

At the Outline stage, each host organisation should provide their identified applicants with a brief letter describing the process by which the applicants were chosen and how this has ensured equality, diversity and inclusion. This letter can be the same for each applicant that is being supported by the Host Organisation, and should be signed at the Pro Vice Chancellor level. Without this statement the Outline proposal will be office rejected and will not go forward to the Outline sift panel stage.

Detail of the exact support provided by the Host Organisation should be given in detail at the full proposal stage.

The Host Institution is expected to provide support and development opportunities during the Fellowship and provide a solid foundation for career prospects beyond the term of the grant. Ideally, the Host Institution would commit to providing a permanent position.

Host organisations are expected to give the individual all the support normal for an academic member of staff, even though they may not currently hold an academic position. Provision of the usual infrastructure such as laboratory and office space will be expected, plus other support such as mentoring.

For details of what should be included in the Host Organisation Statement, please see: <http://www.epsrc.ac.uk/skills/fellows/hostorganisationobligations/>.

Additional grant conditions

In addition to the standard terms and conditions for EPSRC fellowships, the following will apply to successful applicants:

GAC 1. Start Date

Notwithstanding RGC4, this grant has a latest start date of 29 June 2018, no slippage to this date will be allowed.

Key dates

Activity	Date
Deadline for Outlines	09 November 2017
Deadline for Full Proposals	23 January 2017
Interview Panel	Week commencing 07 May 2018
Funding decision	Late May
Grant start date	June 2018

*EPSRC aims to adhere to the key dates as published, however there may be exceptions where the sift or interview meeting may have to change due to panel member availability.

Contacts

Requests for help and advice concerning the writing and costing of your proposal should be addressed to your institutional Research Office in the first instance.

If you have any questions about preparing and submitting your proposal using Je-S, please contact the Je-S helpdesk (JeSHelp@rcuk.ac.uk, 01793 444164).

- EPSRC fellowship inbox: EPSRCfellowships@epsrc.ac.uk
- Sarah Halliwell, Portfolio Manager. Email: sarah.halliwell@epsrc.ac.uk or telephone: 01793 44 4298
- Rebecca Williams, Portfolio Manager. Email: Rebecca.Williams@epsrc.ac.uk or telephone: 01793 44 4106.

Change log

Name	Date	Version	Change
Sarah Halliwell	21/09/2017	1	N/A
Sarah Halliwell	09/10/2017	2	Contacts updated

Je-S attachments Check List

Outline:

Attachment Type	Maximum page length	Mandatory/ Optional	Extra guidance
Case for Support	4 pages	Mandatory	
C.V.	2 pages	Mandatory	
Justification for	2 pages	Mandatory	

Resources			
Other attachment – use this for the Outline stage Host Organisation statement	2 pages	Mandatory	Pro Vice Chancellor letter of support detailing the process by which the applicant was identified and how this incorporates current ED&I policy.

Full proposal:

Attachment Type	Maximum page length	Mandatory/ Optional	Extra guidance
Proposal Cover Letter	No page limit	Mandatory	The cover letter can be used to highlight any important information to EPSRC. This attachment type is not seen by panel members.
Case for Support	9 pages	Mandatory	Comprising up to two A4 sides for a track record, and seven A4 sides describing proposed research and its context.
Pathways to Impact	2 pages	Mandatory	
Applicant's C.V.	2 pages	Mandatory	
Host Organisation Statement	2 pages	Mandatory	Written on headed paper and signed by the Pro Vice Chancellor of the host organisation.
Diagrammatic Work-plan	1 page	Mandatory	Depending on the nature of the research proposed, this is not expected to be a detailed and fixed work plan for the full duration of the project.
Justification for Resources	2 pages	Mandatory	
List of publications	No page limit	Mandatory	Please list any related publications. If you have no relevant publications

			please upload a dummy document.
Project Partner Letters of Support	No page limit	As required	Must be included from all named project partners. Must be on headed paper and be signed and dated within six months of the proposal submission date.
Technical assessment	No page limit	As required	If you plan to use a major facility in your research, such as those funded centrally by EPSRC or a European facility, contact the facility before applying to EPSRC to check if your proposed research is feasible, and obtain a Technical Assessment if Je-S marks it as required.
Other Attachment	No page limit	As required	This can be used for a document that does not fit under any of the headings above. This attachment type is not seen by panel members.

Please ensure you adhere to the above attachment requirements when submitting your proposal. Any missing, over length or unnecessary attachments may result in your proposal being rejected.

Annex 1

Indicative quotas have been assigned for each university.

These have been calculated using a snapshot of the EPSRC funding each of the following universities had on 01 April 2017; this includes all competitively won research grants and training grants. Each block of 10 universities has an indicative quota for the number of proposals we expect to receive from them.

If your university or eligible Independent Research Organisation (IRO) is not included in the list and you would like to submit an outline proposal then please contact us at buildingleadership@epsrc.ac.uk

University	Suggested number of applications
Aberystwyth University	1
Albert Ludwig University of Freiburg	1
Aston University	2-4
Bangor University	1
Birkbeck College	1
Brunel University London	2-4
Cardiff University	3-5
City, University of London	2-4
Coventry University	1
Cranfield University	2-4
De Montfort University	1
Durham University	3-5
Edinburgh Napier University	1
Falmouth University	1
Goldsmiths College	1
Harper Adams University	1
Heriot-Watt University	3-5
Imperial College London	5-7
Keele University	1
King's College London	4-6
Kingston University	1
Lancaster University	3-5
Leeds Beckett University	1
Liverpool John Moores University	1
London School of Economics & Pol Sci	1
London South Bank University	1
Loughborough University	4-6
Manchester Metropolitan University	1
Middlesex University	1
Newcastle University	4-6
Northumbria University	2
Nottingham Trent University	1
Open University	2
Oxford Brookes University	1
Queen Mary, University of London	3-5
Queen's University of Belfast	3-5
Royal College of Art	1
Royal Holloway, Univ of London	2-4
Sheffield Hallam University	1
Swansea University	2-4
Teesside University	1
The Francis Crick Institute	1
The Robert Gordon University	1
The University of Manchester	5-7

University	Suggested number of applications
University College London	5-7
University of Aberdeen	2
University of Bath	4-6
University of Birmingham	5-7
University of Bolton	1
University of Bradford	1
University of Brighton	2
University of Bristol	5-7
University of Cambridge	5-7
University of Central Lancashire	1
University of Dundee	2
University of East Anglia	2
University of Edinburgh	4-6
University of Essex	2
University of Exeter	3-5
University of Glasgow	4-6
University of Greenwich	1
University of Hertfordshire	1
University of Huddersfield	2-4
University of Hull	1
University of Kent	2
University of Leeds	4-6
University of Leicester	2-4
University of Lincoln	1
University of Liverpool	3-5
University of Nottingham	5-7
University of Oxford	5-7
University of Plymouth	2
University of Portsmouth	1
University of Reading	2-4
University of Salford	1
University of Sheffield	5-7
University of South Wales	1
University of Southampton	5-7
University of St Andrews	3-5
University of Stirling	1
University of Strathclyde	4-6
University of Sunderland	1
University of Surrey	3-5
University of Sussex	2-4
University of the Highlands and Islands	1
University of the West of England	2
University of the West of Scotland	1
University of Ulster	1
University of Warwick	4-6
University of York	4-6

Annex 2

Description of priority areas:

Robotics and artificial intelligence systems

Robotics and Artificial Intelligence Systems brings together a wide range of technologies including artificial intelligence, mechatronics, design, manipulation, sensing, automation and autonomy and robot control and is beginning to have a direct impact across many sectors.

EPSRC wishes to strengthen and extend the UK's capabilities in the development of Robotics and Artificial Intelligence (RAI) Systems to drive and accelerate the translation of fundamental science in RAI Systems into industry, which will increase productivity and open up new cross disciplinary opportunities that are not currently available.

RAI Systems research has the potential to underpin developments across multiple industrial sectors and therefore, proposals are welcome which are focussed on creating new capabilities in extreme and challenging environments; enabling healthy/independent living; ensuring safe, efficient transport; and developing next-generation manufacturing.

High Productivity Services through Artificial Intelligence, data and digital technologies

Artificial Intelligence, Internet of Things, 5G, Distributed Ledger Technologies, Data Analytics, Digital Platforms and Immersive Technologies will all play important roles to transform all sectors of the economy, providing new business opportunities and productivity increases for the organisations that adopt them. In order to maximise adoption, while minimising potential negative social impacts, a whole systems, responsible [ethical] and multidisciplinary approach is needed. One key aspect will be to develop systems that augment human capability rather than simply replace it. We are looking for Innovation Fellows able to address the many challenges around embracing technology in conjunction with process/business model innovation, privacy, security, digital identities and trust as well as in social and behavioural fields.

Development and manufacture of batteries for the electrification of vehicles

ISCF Faraday Challenge has been proposed to ensure the UK emerges as a world leader in the area of novel battery technologies. The UK has a strong academic base in this field covering a broad range of disciplines e.g. engineering, chemistry, physics etc. However, for the UK to be a sustained leader in this field we require stronger engagement between our academic and industrial counterparts. Innovation fellowships in this area should seek to establish leaders in the field of battery technologies who can transcend both the academic and industrial interface through a strong programme of research which benefits from industrial support including practical experience in the Industrial environment. Fellowship proposals should be multidisciplinary and should seek to align to the programme of research commissioned by the ISCF Faraday Institution.

Digital manufacturing

Industrial Digital Technologies (IDT) including Artificial Intelligence (AI), Robotics and Automated Systems, Visualisation, Connectivity and Industrial Internet of Things (IIoT), and Additive Manufacturing (AM) are all examples of technologies that have potential to increase the productivity and agility of UK Manufacturing. Adoption and integration of IDTs into production and logistics will allow new businesses to form, increase the speed to market, and integrate and strengthen UK supply chains.

Quantum technologies

Quantum technologies (devices, components and systems) being developed in the areas of quantum computing and simulation (including algorithms), quantum sensing, metrology and imaging, and quantum communications (including delivering secure transmission of information and the reliable communication of quantum information) offer enormous potential to build new products, services, processes and industries that will enhance the quality of life of citizens and generate employment and wealth. Creation of commercially exploitable knowledge and capabilities will accelerate and enhance innovation of quantum technologies in the UK.

Cheap and clean energy technologies

New technologies and systems approaches that enable integration of complex services and smart technologies that can contribute to transforming the energy infrastructure from a centralised system to a flexible decentralised dynamic system so that businesses and energy users can reap the benefits of clean affordable energy.

Integrated and sustainable cities - including low energy buildings

Multidisciplinary research programmes bringing together construction, manufacturing, energy and digital technologies to revolutionise the construction phase, through-life management and energy consumption of buildings. The use of digital models (Building Information Modelling or BIM) to design and manufacture buildings using modularised components, enabling faster delivery and assembly could also accelerate the incorporation of novel materials and technologies developed. Technologies to generate, store and release energy from and within a building can deliver significant reduction in operational cost. The overall aim is to deliver improved social, environmental and economic value in a building. Demonstrating a whole-life performance and circular economy approach to managing assets will also be relevant to this priority.

New approaches to data science

Increasing areas of technology and society are becoming ever more data rich. This is creating a growing need to be able to manage, process and interpret multiple sources of increasingly complex and/or large-scale data in order to enable people to extract value, make decisions and take appropriate action. New approaches are needed that develop new analytical capabilities that are driven by novel research in the Mathematical Sciences and/or ICT. Substantial involvement of end-users of the proposed research from the beginning is essential to enable the programme to be grounded in a real world context, and to promote transfer knowledge and expertise. Due to the potential impact of these

new approaches on people's daily lives, aspects of ethics, responsible research and innovation, trust, identity, privacy and security should also be considered.

Relevant research areas include (but are not limited to) Theoretical Computer Science, Artificial Intelligence Technologies, Databases, Graphics and Visualisation, Statistics and Applied Probability, Logic and Combinatorics, Numerical Analysis, Operational Research, Information Systems and Architectures and Operating Systems.

Leading edge healthcare and medicines

This area covers the novel engineering, ICT, mathematical and physical sciences required to maintain and strengthen the UK's position in leading edge healthcare and medicines. This encompasses areas of research identified by EPSRC's delivery plan ambitions for a Healthy Nation, and the recently published Life Sciences industrial strategy.

- Scale up and manufacture of medicines including the manufacturing of Future Treatments (for example, cell and gene therapies), Complex Medicines (ADCs, Oligonucleotides, viral vectors, new vaccines) and Established Medicines (Small molecules, mAbs, traditional vaccines, therapeutic proteins) where the application of process innovation (e.g. continuous processing, digital manufacturing, synthetic biology) creates a strong opportunity.
- Early detection and diagnosis of disease
- Prevention of non-communicable diseases and life course health
- Living with mental health problems
- Healthy ageing, including technologies for dignity and (p)rehabilitation to better enable independent living
- Transforming community health and care through the application of sensing technologies and the real-time analysis of information.

Space research and agricultural engineering

EPSRC is interested in supporting excellent engineering and physical sciences research able to make a contribution in the areas of space research and agricultural engineering.

Interface with arts and humanities research

Fellowship proposals at this interface may include fellows situated in an Art and Humanities school or department. The proposed project will sit at the interface of the engineering and physical sciences with the arts and humanities. It is possible for the proposal to include collaborators or partners from other disciplines to complement the fellow's own expertise. Potential research areas are:

- Creative and Digital industries, for example linking artistic, creative, heritage and design skills with digital, computing and coding skills.
- Development of immersive technologies and live experience, for example the intersections between AR and VR and the ways they are transforming

the delivery of creative content (including their significant potential spillover effects into other sectors e.g. health care).

- Fellowships connecting the digital humanities with data science and analytics, computing science or related areas, for example in the development of “Big Data” approaches.
- Inter-disciplinary design fellowships exploring the potential for design approaches to integrate and connect across disciplinary boundaries.

Interface with Biotechnology and biological sciences

BBSRC is particularly looking to jointly support development of the bioinformatics tools and computational approaches that are required to extract value and generate new biological understanding from the huge volume and diversity of bioscience data.

Interface with Economic and social sciences

ESRC is particularly looking to jointly support fellowships which develop our understanding of the potential for digitisation and automation in services, the skills and business models required for this transformation, consumer behaviour, policy and regulation, and challenges to the digitisation of services with new technologies.

Proposals in-line with any of these priorities at the interface with NERC may also be considered by agreement before submission.