

## EPSRC Fellowships – a new approach

EPSRC's Strategic Plan committed us to providing greater support to the world-leading individuals who are delivering the highest quality research to meet UK and global priorities. We will develop the next generation of researchers with the greatest potential across the postdoctoral, early and established career stages. The changes in our Fellowships schemes are the first steps in this process.

Our new approach to fellowships has arisen from extensive discussions carried out in 2009. This faster, more streamlined and flexible process will be introduced from July 2011 and merges several existing schemes. Our financial commitment to this type of support is broadly similar to recent years.

To maintain the UK's global research standing in the context of increasing international competition and with limited funding available to us, we must focus our support on those individuals who have the most potential to deliver the highest quality research which meets UK and global priorities. The support also needs to be linked to our strategic priorities and we will expect a greater proportion of our fellows to be focussed on areas where growth is required and where developing leaders can integrate their work into the wider landscape. Consequently fellowships will not be open in all areas, at all career stages, at all times. We have gone through an initial exercise of identifying the first areas linked to our Shaping Capability goal in which fellowships will be offered

<http://www.epsrc.ac.uk/ourportfolio/Pages/default.aspx>. This will be an ongoing process and priority areas will be updated throughout the Delivery Plan period. To begin with, we expect these priorities to be valid for a year (although new priorities could be added) and we will give advance notice of any new priorities before they change. There are other organisations that provide fellowships across the engineering and physical sciences. We have been working with some of these other organisations, such as the Royal Society, to look at how our respective fellowship support activities can complement each other.

Other principles for the fellowship framework include:

- Specification of the desired qualities, experience, achievements or attributes, and providing flexible support
- At transition points we will put in place mechanisms to re-focus our support on those who have the most potential, through a competitive and outcomes driven review process
- We expect to work in partnership with universities and business to both identify candidates and enhance the research environment for established and emerging leaders. Our expectation is that Universities should take more responsibility for matching candidates to the fellowship specification. We will be developing and releasing a 'statement of expectations' for our fellowships
- To accelerate the development of leadership skills, we will encourage exposure to different environments and ideas, for example by encouraging mobility between different organisations and exposure to creative techniques
- Development of leadership cohorts by networking and provision of access to skills and experience

### What has changed?

- There will be no closing date for the submission of applications
- An outline stage will not be used - applicants will submit a full application

- Eligibility conditions based on years of post-doctoral experience or permanent academic tenure will no longer apply; as this doesn't allow for variations of career paths across the EPS disciplines
- A [person specification](#) will be used to describe the desired attributes for each career stage, shifting the focus away from eligibility defined by years of post-doctoral experience towards a competency-based approach with an emphasis on the skills and attributes that leaders (and aspiring leaders) need to be able to demonstrate
- Under this new fellowship framework, fellowship applications will be invited only in specific research areas that are linked to our strategic priorities
- There will be a single 'EPSRC Fellowship' scheme under which three career stages will be supported (postdoctoral, early career and established career). This will consolidate Challenging Engineering, postdoctoral, career acceleration and leadership fellowships into a new framework which addresses the principles outlined above
- We will extend our support beyond the 'leadership fellowship' career space to those currently working in the more established 'senior fellow' space
- We will be more flexible on the amount of investigator time a fellow dedicates to their fellowship (in the past we expected fellows to devote 100% of their time to the fellowship) thus allowing the fellow to apply for a level of support that suits them and gives them the option of staying active within their department or undertaking some consultancy as a route to impact
- Fellowships may focus on public engagement with research by, for example, seeking to examine, develop and apply the range of methods and skills appropriate to involve the public with scientific research. Public engagement should be interpreted broadly to include dialogue with the public concerning research issues and decision-making on the scope of projects; consultations on emerging research results and issues; the demonstration and explanation of research results and the dissemination of project outcomes to a non-technical audience. The fellowship must relate public engagement activities directly to current or contemporary research. This does not include general science education nor outreach to a university's local community

## Who can apply

Applicants are expected to hold a PhD or have equivalent research experience; however, there are no eligibility rules based on years of post-doctoral experience or whether you hold (or do not hold) a permanent academic position, as this doesn't allow for variations of career paths across the EPS disciplines.

There are no nationality restrictions imposed by EPSRC.

In the case of postdoctoral awards, we expect that fellows have gained their PhD by the start date of the fellowship but consideration will be given to applicants who have taken a non-standard career path after their primary degree.

EPSRC has defined three career stages (postdoctoral, early and established career) and the attributes expected at each stage. In conjunction with your host institution, you should evaluate your track record and assess which career stage you should apply against (if that stage is open to applications) and ensure that you are able to demonstrate how you fulfil each of the expected attributes.

Applications are welcomed from candidates who wish to re-establish themselves after a career break or other period of absence from active research.

## EPSRC Fellowship – Person Specification

Attribute	Post-doctoral	Early career	Established career
<b>Research Excellence</b>	Delivery of outstanding research and an indication of where the research contributes to delivering impact. Awareness of the international context of the research.	Has a track record of outstanding research and in delivering impact. Shows a strong awareness of the international context of the research and starting to show evidence of recognition in the community on an international scale.	Has a track record of outstanding research and in delivering impact. Evidence of international standing and influence in the context of the research and shows evidence of recognition in the community on an international scale.
<b>Setting the research agenda</b>	Has a clear vision of the contribution the applicant can make to their research area. Evidence of independence of (research) ideas.	Evidence of showing leadership within the research community and evidence of pushing the boundaries of the research area.	Demonstration of leadership within the research community and evidence of pushing the boundaries of the research area.
<b>Strategic Vision</b>	Shows an awareness of different research in other fields or across technology readiness levels, an aspiration to work across boundaries and/or to conduct high risk research and finding a network of independent contacts so that the applicant is getting positioned to do this.	Has some experience in identifying, exploring and developing research opportunities more broadly and across different interfaces. An awareness of how to position themselves to take up these opportunities and an ability to make decisions to deliver this vision.	An aptitude for identifying, exploring and developing research opportunities more broadly and across different interfaces. Can demonstrate where they have positioned themselves to take up these opportunities and has the ability to make decisions to deliver this vision.
<b>Profile and Influence</b>	Not strongly applicable at this career stage.	Shows potential and aptitude to act as an ambassador and advocate for a research field/theme and for research in general. Advising and influencing into policy making.	Evidence of acting as an ambassador and advocate for a research field/theme and for research in general. Advising and influencing into policy making.

<b>Attribute</b>	<b>Post-doctoral</b>	<b>Early career</b>	<b>Established career</b>
<b>Inspirational Team leader</b>	Can provide evidence of an aptitude to lead and inspire for example, through mentoring or self organisation of peers.	Has ability to lead and inspire their own research team. Ability to identify and maximise potential in others (i.e. get the best out of people).	Ability to lead and inspire. Ability to identify and maximise potential in others (i.e. get the best out of people).
<b>Communication and engagement skills</b>	Demonstrates excellent communications and interpersonal skills and aspires to develop these across a broad audience.	Demonstrates excellent communications and interpersonal skills and aspires to develop these further across a broad audience.	Possesses excellent communications and interpersonal skills.

## **Fellowship location**

Fellowships can be held at any UK university or similar Higher Education Institution (HEI) that is eligible for Research Council funding, however they cannot be held at Research Council Institutes. For further guidance please refer to the EPSRC Funding Guide at <http://www.epsrc.ac.uk/funding/apprev/basics/Pages/fundingguide.aspx>

You will need a letter of support from your host organisation and therefore you should contact the Head of Department at your host organisation and their Research Administration (depending on the organisation this may be departmental or central) who will advise you about costing your proposal and internal procedures relating to submitting a research proposal through Je-S. Your fellowship must be costed and submitted by the host organisation. If you are applying from overseas, you must have agreement from a UK HEI to host the fellowship.

## Areas in which fellowships are available

EPSRC's Capability and Challenge Themes have gone through an initial exercise of prioritising the areas in which fellowships will be offered. This will be an ongoing process and priority areas will be updated on a regular basis throughout the Delivery Plan period.

In the first instance, we expect the below priorities to be valid for a year. Where priorities are removed we will give advance notice.

**We will not accept applications in areas outside of those identified below.**

Applicants should refer to the thematic programme priorities for additional details on the research areas we wish to appoint fellows in.

Thematic areas	Postdoctoral	Early career	Established career
<a href="#">Engineering</a>	Applications not invited at this career stage	Water Engineering Complex Fluids and Rheology Performance and Inspection of Mechanical Structure and Systems	Water Engineering Complex Fluids and Rheology Performance and Inspection of Mechanical Structure and Systems
<a href="#">Manufacturing the Future</a>	Applications not invited at this career stage	Scale-up Methodologies for Novel Manufacturing Products and Processes Manufacturing Informatics Engineering Design Methodologies for Emerging Technologies	Applications not invited at this career stage
<a href="#">Physical Sciences</a>	Theoretical Physics	Catalysis Quantum Technologies Graphene and Carbon-based Nanomaterials Physical Sciences Grand challenges	Catalysis Quantum Technologies Physical Sciences Grand Challenges
<a href="#">Mathematical Sciences</a>	Statistics & Applied Probability	Statistics & Applied Probability	Statistics & Applied Probability

Thematic areas	Postdoctoral	Early career	Established career
<a href="#">Information and Communication Technologies</a>	Applications not invited at this career stage	<p>Many-Core Architectures and Concurrency in Distributed and Embedded Systems</p> <p>Towards and Intelligent Information Infrastructure (TI<sup>3</sup>)</p> <p>Photonics for Future Systems</p> <p>New and Emerging Areas in ICT</p> <p><b>Applicants must demonstrate close alignment to the 'Working Together' priority</b></p>	<p>Many-Core Architectures and Concurrency in Distributed and Embedded Systems</p> <p>Towards and Intelligent Information Infrastructure (TI<sup>3</sup>)</p> <p>Photonics for Future Systems</p> <p>New and Emerging Areas in ICT</p> <p><b>Applicants must demonstrate close alignment to the 'Working Together' priority</b></p>
<a href="#">Energy</a>	End-use Energy Demand	<p>End-use Energy Demand</p> <p>Carbon Capture and Storage</p> <p>Marine Energy Research</p>	<p>Carbon Capture and Storage</p> <p>Marine Energy Research</p> <p>Offshore Wind Research</p>
<a href="#">Healthcare Technologies</a>	Applications not invited at this career stage	<p>Regenerative Medicine</p> <p>Diagnostics and Therapeutics</p>	Applications not invited at this career stage

## Contacts

If you are unsure whether your research falls within the remit of this call, or if you have particular theme area queries, please contact the most appropriate portfolio manager or a fellowship co-ordinator as follows:

- Physical Sciences: Dr Claire Higlett - [Claire.Higlett@epsrc.ac.uk](mailto:Claire.Higlett@epsrc.ac.uk)
- Engineering: Dr Louise Tillman - [Louise.Tillman@epsrc.ac.uk](mailto:Louise.Tillman@epsrc.ac.uk) or Dr Talit Ghaffar - [Talit.Ghaffar@epsrc.ac.uk](mailto:Talit.Ghaffar@epsrc.ac.uk)
- Information & Communications Technology: Dr Christina Turner - [Christina.Turner@epsrc.ac.uk](mailto:Christina.Turner@epsrc.ac.uk) or Dr Diane Howard - [Diane.Howard@epsrc.ac.uk](mailto:Diane.Howard@epsrc.ac.uk)
- Mathematical Sciences: Dr Caterina Mora - [Caterina.Mora@epsrc.ac.uk](mailto:Caterina.Mora@epsrc.ac.uk) or Dr Vivienne Blackstone - [Vivienne.Blackstone@epsrc.ac.uk](mailto:Vivienne.Blackstone@epsrc.ac.uk)
- Manufacturing the Future: Dr James Fleming - [James.Fleming@epsrc.ac.uk](mailto:James.Fleming@epsrc.ac.uk)
- Healthcare Technologies: Dr Hannah Maytum - [Hannah.Maytum@epsrc.ac.uk](mailto:Hannah.Maytum@epsrc.ac.uk)
- Energy: Dr Samantha Riches - [Samantha.Riches@epsrc.ac.uk](mailto:Samantha.Riches@epsrc.ac.uk)

EPSRC reserves the right to reject, at any stage, applications that do not fit the remit, eligibility or ethos of this scheme, or are considered to be outside EPSRC's remit.

General enquiries about fellowships can be directed to: [EPSRCfellowships@epsrc.ac.uk](mailto:EPSRCfellowships@epsrc.ac.uk)

## Application and Peer Review Process

There will be no deadlines for the new fellowship scheme; applicants should apply when they are ready to submit.

Applications can be submitted at any time and will be processed on a rolling basis. Fellowship applications will be prioritised twice a year in approximately January/February and July, at our standard-grant panel meetings. Applications will be sent to reviewers for comments (expert peer review) and, if there is sufficient support be put forward to the earliest possible prioritisation panel meeting, although we cannot guarantee that proposals will go to a specific panel meeting due to variations in the time it takes to secure a sufficient number of reviewer reports. Please allow enough time for the postal peer review stage which can take a minimum of 3 months. Interview panel meetings will take place within the six weeks following the prioritisation panels.

Applicants whose proposal is considered at a prioritisation panel in January/February will be informed of the final outcome by April. If you are aiming for this panel meeting you must put your start date as 1<sup>st</sup> April.

Applicants whose proposal is considered at a prioritisation panel in July will be informed of the final outcome by October. If you are aiming for this panel meeting you must put your start date as 1<sup>st</sup> October.

### Expert peer review and prioritisation panels.

The [application process](#) for the EPSRC Fellowship scheme is split into two stages: submission and assessment of a full application to a prioritisation panel meeting, followed by interview for shortlisted applicants.

Full proposals will be sent out to expert peer review and will be assessed against the following criteria:

- Research Quality
- The Candidate (including qualities and experience)
- Importance
- Research Environment
- Impact
- Resources and Management
- Fit to Strategic Priorities

If the reviews are sufficiently supportive, the proposal will go on to the panel stage, and you will have the opportunity to respond to reviewers' comments. If the reviews are not supportive, the proposal will be rejected at this point and you will be sent copies of the reviewers' forms as feedback.

Fellowships proposals will be considered at the most appropriate prioritisation panel meeting twice a year to assess primarily the quality of the science, however all criteria will be assessed. The final decision as to which panel meeting a proposal is assessed at rests with EPSRC. Successful applicants will be invited to the interview stage.

### Interview Panel

At the interview stage, an interview panel will assess primarily the qualities of the candidate, however all criteria may be assessed.

## Assessment Criteria

You may be assessed against any of these criteria at any stage but there will be more of an emphasis on the Research Quality at the prioritisation panel and the individual Candidate at the interview panel. Please ensure that your application addresses each of the assessment criteria.

<b>Assessment Criteria</b>	<b>Postdoctoral</b>	<b>Early Career</b>	<b>Established Career</b>
<b>Research Quality</b>	<p>Your research should demonstrate a high degree of novelty in the proposed research in comparison to the broader research context of the area internationally.</p> <p>You should be able to articulate a strong vision for the research proposed in the application and possess the ability to deliver it.</p>	<p>The research 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 and truly innovative.</p> <p>You should have a track record of outstanding research and in delivering impact; and will need to show that you possess the ability to deliver the proposed research.</p> <p>You should articulate a strong vision for the research proposed and how you will build the team around you to deliver it.</p> <p>You should be able to demonstrate some evidence of recognition within the research community on an international stage.</p>	<p>The research 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 and truly innovative.</p> <p>You should have a track record of outstanding research and in delivering impact; and will need to show that you possess the ability to deliver the proposed research.</p> <p>You should articulate a strong vision for the research proposed and the team delivering it in the application.</p> <p>You must be able to demonstrate evidence of recognition and influence in the community on an international scale.</p>



<b>Assessment Criteria</b>	<b>Postdoctoral</b>	<b>Early Career</b>	<b>Established Career</b>
<b>The Candidate</b>	<p>You should be able to demonstrate a vision of the contribution that will be made to the research area and an independence of research ideas.</p> <p>You must show an awareness of research in other fields or across technology readiness levels, and an aspiration to work across boundaries and/or to conduct high risk research.</p> <p>You can show evidence of an aptitude and potential to lead, inspire and influence for example, through mentoring or self organisation of peers. You should show how you have developed a network of relevant independent contacts.</p> <p>You must demonstrate excellent communications and interpersonal skills and show that you aspire to develop these across a broad audience.</p>	<p>Evidence of leadership. This is both 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.</p> <p>You should exhibit an ability to work broadly and across different interfaces, identifying and positioning yourself to take advantage of opportunities.</p> <p>You can show potential to act as an ambassador and advocate for research and an ability to influence.</p> <p>You must demonstrate excellent communications and interpersonal skills.</p>	<p>You must show evidence of leadership within the research community, pushing the boundaries of research.</p> <p>You must show how you work across interfaces and an aptitude for identifying and engaging in new and different research opportunities that may not be recognised by others.</p> <p>You can show evidence of acting as an ambassador and advocate for research and an ability to influence beyond your immediate research area.</p> <p>The ability to inspire and lead both your own team and more broadly.</p> <p>You must demonstrate excellent communication and interpersonal skills.</p>
<b>Importance</b>	Evidence of how the proposed research may underpin or contribute to societal challenges (including EPSRC challenge themes); other research areas; the success of the UK economy; and emerging industry.	Evidence of how the proposed research may underpin or contribute to societal challenges (including EPSRC challenge themes); other research areas; the success of the UK economy; and emerging industry.	Evidence of how the proposed research may underpin or contribute to societal challenges (including EPSRC challenge themes); other research areas; the success of the UK economy; and emerging industry.

<b>Assessment Criteria</b>	<b>Postdoctoral</b>	<b>Early Career</b>	<b>Established Career</b>
<b>Research Environment</b>	<p>You must be able to articulate a strong vision for your role in the team and how it will deliver the research proposed in the application.</p> <p>What was the justification for your choice of host organisation? They must be able to demonstrate an appropriate level of support and commitment to your career as evidenced through the Host Organisation Statement.</p>	<p>You should be able to demonstrate a strong vision for how your team will deliver the research proposed in the application, and how you will develop a team in the first place.</p> <p>What was the justification for your choice of host organisation? They must be able to demonstrate an appropriate level of support and commitment to your career as evidenced through the Host Organisation Statement.</p>	<p>You must be able to demonstrate a strong vision for how your team will deliver the research proposed in the application, including developing cross-institutional collaboration where appropriate.</p> <p>Your host organisation must be able to demonstrate an appropriate level of support and commitment to your career as evidenced through the Host Organisation Statement.</p>
<b>Impact</b>	<p>Who may benefit from the proposed research, how they may benefit and what will be done to ensure they have the opportunity to benefit.</p> <p>What pathways to impact activities will be undertaken?</p> <p>Evidence of how you will use your experience and networks to ensure the above two points?</p>	<p>Who may benefit from the proposed research, how they may benefit and what will be done to ensure they have the opportunity to benefit.</p> <p>What pathways to impact activities will be undertaken?</p> <p>Evidence of how you will use your experience and networks to ensure the above two points?</p>	<p>Who may benefit from the proposed research, how they may benefit and what will be done to ensure they have the opportunity to benefit.</p> <p>What pathways to impact activities will be undertaken?</p> <p>Evidence of how you will use your experience and networks to ensure the above two points?</p>

<b>Assessment Criteria</b>	<b>Postdoctoral</b>	<b>Early Career</b>	<b>Established Career</b>
<b>Resources and Management</b>	<p>You must be able to justify the planning and project management of the proposed research programme, including the management of any staff requested.</p> <p>You must be able to demonstrate that the resources requested in this application are justified and appropriate for delivering the proposed research.</p> <p>You should identify the main risks and put contingencies in place.</p>	<p>You must be able to justify the planning and project management of the proposed research programme, including the management of any staff requested.</p> <p>You must be able to demonstrate that the resources requested in this application are justified and appropriate for delivering the proposed research.</p> <p>You should identify the main risks and put contingencies in place.</p>	<p>You must be able to justify the planning and project management of the proposed research programme, including the management of any staff requested.</p> <p>You must be able to demonstrate that the resources requested in this application are justified and appropriate for delivering the proposed research.</p> <p>You should identify the main risks and put contingencies in place.</p>
<b>Fit to Strategic Priorities</b>	Evidence that the proposed research is aligned to EPSRC strategic priorities as defined by individual Capability and Challenge Themes – please refer to Theme plans	Evidence that the proposed research is aligned to EPSRC strategic priorities as defined by individual Capability and Challenge Themes – please refer to Theme plans	Evidence that the proposed research is aligned to EPSRC strategic priorities as defined by individual Capability and Challenge Themes – please refer to Theme plans

## How to apply

There is no outline stage in the new Fellowship process. Applicants are required to submit a full proposal.

Together with your Research Organisation you will be responsible for selecting the appropriate Person Specification and levels of resource requested.

Please ensure your access to the Je-S system to be aware of documentation requirements. Full applications must be submitted using the Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

To add a new proposal in Je-S, please select:

- Council: '**EPSRC**'
- Document type: '**Fellowship Proposal**'
- Scheme: '**EPSRC Fellowship**'
- Call - on Project Details page select one of the following: '**Fellowships-Postdoctoral**' / '**Fellowships-Early Career**' / '**Fellowships -Established Career**'

Guidance for completion of the application is provided through the Je-S help text, available from the Je-S System front page, and context sensitive help throughout the system.

Please note that font size 11 is the minimum that will be accepted.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration office, not to EPSRC.

As part of the Je-S application the following documentation must be attached:

- **Proposal Cover Letter** (up to 2 sides A4)
- **Case for Support** (up to a maximum nine sides of A4)
- **Pathways to Impact** (up to a maximum two sides of A4)
- **Applicant's CV** (up to a maximum two sides of A4)
- **Host Organisation Statement** (up to a maximum two sides of A4)
- **Work-plan** (maximum one side of A4)
- **Justification of Resources** (up to a maximum two sides of A4)
- **List of Publications** (no page limit)

Where applicable:

- **Statements of Support** from any project partners (no page limit)

Quotes and justification for equipment (no page limit) and Technical assessments for the use of a major facility (no page limit) should also be attached, where applicable.

You must also include a **Proposal Cover Letter** with your application outlining to which fellowship priority research area you believe your application is relevant. This letter will only be seen by EPSRC and will not be sent to peer review. It is EPSRC's ultimate responsibility to assign applications to the appropriate priority area, and proposals outside the specific remit of these topics will be rejected before peer review.

**Please note** that in response to the Wakeham Review Research Councils UK (RCUK) published a report *Efficiency 2011-15: Ensuring Excellence with Impact* detailing plans to drive efficiency in research funding and changes have been made to how Research Councils fund equipment; please ensure you are familiar with the new procedures. <http://www.rcuk.ac.uk/research/Pages/Efficiency2011.aspx>

In addition to the above documentation you will be required to provide information in Je-S, please allow sufficient time to complete the online application forms.

**Case for Support**, up to a maximum nine sides of A4 comprising:

- Track Record of Applicant (2 sides of A4)
- Description of proposed research, ensuring that all the assessment criteria are addressed
- A statement on how the proposed research fits with EPSRC strategic priorities and what contribution it will make to the shape of the landscape

**Pathways to Impact** (up to a maximum two sides of A4)

In the Impact Summary, you will have described who potential beneficiaries might be, and how the research might impact them. This document is your opportunity to describe what you will actually do to facilitate this. Ideally the Pathways to Impact attachment is specific to users and beneficiaries of the research outside the academic research community, but plans for academic impact may be included where this forms part of the critical pathway towards economic and societal impact.

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.

(<http://www.rcuk.ac.uk/kei/impacts/Pages/home.aspx>)

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

- Methods for communications and engagement
- Collaboration and exploitation in the most effective and appropriate manner
- The project team'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.

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

Please include the following:

- 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 academic history, listed in reverse order. The dates of any degrees obtained and the viva date for your PhD should be stated.
- Track record of research funding: please include start/end dates, funding body, value of award, type of grant (e.g. first grant, fellowship etc), your role on the grant (PI, Co-I, Researcher etc). Please ensure that any fellowship awards are clearly highlighted.
- Any current teaching commitments.
- Any current administrative activities: examples may include editorial responsibilities, committee membership etc.
- Other: examples may include invited talks, awards, prizes, memberships of professional bodies etc.

Please do not include details of possible reviewers on your CV. Please ensure that any breaks in your career due to maternity, paternity or adoptive leave, ill health, career breaks or unemployment are clearly stated, as well as any periods of part time working. Peer review will be advised to take account of any career breaks when assessing your track record, in particular if there are any corresponding breaks in your publication record.

## Host Organisation Statement

Please refer to [Obligations of the Host Research Organisation](#) for details of what should be included in the Host Organisation Statement.

**Work-plan** (maximum one side of A4), depending on the **nature of** the research proposed we would not expect this to be a detailed and fixed work plan for the full duration of the project.

## Justification of Resources (up to a maximum two sides of A4)

In this document (up to two sides of A4) you should explain why the resources you have requested are required to undertake your research project, including implementing the impact plan. This is to help reviewers to make an informed judgment about whether the resources requested are appropriate for the research proposed.

So that you do not miss anything out, we recommend that you follow the 'cost to the proposal' headings used in the application form. For more information about what to do see: <http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/jor.aspx>

## List of Publications (no page limit)

The publication list forms an important part of your track record. You should include a paragraph at the beginning of your publication list to indicate:

- Which journals and conferences are highly rated in your field, highlighting where they occur in your own list.
- Conventions pertaining to the listing of authors in your field; e.g. authors are listed in alphabetical order; the lead author is listed first etc.

Papers should be grouped by:

- Journal Papers: Refereed
- Journal Papers: Not Refereed
- Conference Papers: Refereed
- Conference Papers: Not Refereed
- Other Papers, patents etc

Please place an asterisk beside any papers of which you were the lead author and highlight in italics the most significant papers (up to a maximum of ten.) Please include the numbers of citations for selected publications, if they are relevant within your area of research.

You should not include any papers that are in preparation or recently submitted. You may include papers that have been accepted by the journal/conference and are awaiting publication. Any such proposals should be marked "Awaiting Publication". Any references cited that are not your own must be included within the page limit of the Case for Support.

## Resources

You should carefully consider what resource packages you request as part of your fellowship. 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, for example by spending extended periods of time (up to 12 months) in alternative research environments which are recognised as centres of excellence or by inviting visiting

researchers to come and visit. (by requesting T&S where appropriate for family and research team)

- Maximise their creative potential
- Engage with stakeholders, including the public
- Undertake training and skills development

## What resources can be included in the fellowship?

The type of resources available is determined by the career stage under which you are applying, for example in the case of post-doctoral awards, staff resources are not allowed. Please refer to the Table for examples of the types of resources available. Full details on allowable costs can be found in EPSRC's funding guide.

<http://www.epsrc.ac.uk/funding/apprev/fundingguide/Pages/default.aspx>

The *Postdoctoral award* provides funding for basic salary and provides for the employers' contribution towards National Insurance and superannuation. It can also provide additional funding for reasonable consumables and small items of equipment including non-standard computers, software, travel and subsistence expenses (such as visits to collaborators and conferences), and 'pooled' technical effort, all of which must be specifically justified in the supporting case.

For *Early Career* and *Established Career* awards applicants may request related costs for the programme of research throughout the fellowship. These may include research staff, technicians, visiting researchers, co-applicants, travel and subsistence, equipment (within the current guidelines) consumables, access to facilities and technical support costs.

Resource Package	Postdoctoral	Early career	Established career
Duration	Up to 3 years	Up to 5 years	Up to 5 years
Salary	Up to 100%	Up to 100%	Up to 100%
Travel & Subsistence	Yes	Yes	Yes
Staff	No	Yes	Yes
Visiting Researchers	Yes	Yes	Yes
Equipment	small equipment items e.g. non standard computer	Yes- in line with current EPSRC guidelines for equipment	Yes- in line with current EPSRC guidelines for equipment
Consumables	Yes	Yes	Yes
Public Communication Training	Yes	Yes	Yes

Your salary must be included under the *Directly Incurred Staff* heading. Funds can be requested at your current salary level or the anticipated salary level for the position. The requested salary should be commensurate with the applicant's level of experience, skills and responsibilities that will be undertaken.

Indirect and estates costs related to resources requested should also be included, although these will be calculated for you by your proposed host organisation.

## Period of the fellowship

The duration of the fellowship and the proportion of time that can be supported are flexible. Applicants can choose to spend any where between 50 and 100% FTE on their

fellowship thus allowing the fellow to apply for a level of support that suits them, for example, to allow you to retain some administrative roles within your institution.

The maximum duration, in the first instance, for Early Career and Established Career awards is 5 years (60 months at 100% Full Time Equivalent,) and the maximum duration for post-doctoral stage awards is 3 years (36 months at 100% Full Time Equivalent).

While there is a maximum duration, we welcome shorter fellowships that allow fellows the freedom to initially explore new research avenues.

## **Family Friendly Features**

Where a fellow is ordinarily employed part time their EPSRC fellowship may be held part-time at a minimum level of 50% and their fellowship will be extended accordingly (pro-rata), for example 120 months at 50% FTE. Where a fellow is employed full time but does not spend 100% of their time on their fellowship, the fellowship duration will not be pro-rated. Requests to hold a fellowship below the minimum level of 50% will be considered on a case by case basis.

Where a fellow changes their conditions of employment to work part time during the fellowship, it can be converted to a part time award, at a minimum of 50% FTE, during the course of the Fellowship.

## **Review and Continued Support**

EPSRC fellows holding a Postdoctoral award may, towards the end of their fellowship, apply for continued support through the Early Career award. Applicants will be expected to have used their initial fellowship to advance their career sufficiently to be able to demonstrate the attributes expected of those at the Early Career stage. Such applications will be assessed in open competition with other Early Career applications, taking appropriate account of programme research priorities which will have emerged from EPSRC's 'Shaping Capability' goal from its 2011-15 Delivery Plan.

In the case of Early Career and Establish Career awards of 5 year duration, there will be a review point at year 3 where fellows have the opportunity to either continue to the end of the initial 5 year award or request additional time and resources (bringing the total duration to 8 years). We shall examine whether the initial fellowship has been used effectively to advance your career to strongly demonstrate your attributes as internationally acclaimed research leader. Again, the assessment will be undertaken in the context of the Council's 'Shaping Capability' priority areas as they exist at the review point.

## **Additional Resources**

In exceptional circumstances it may be possible for successful fellows to request additional travel resources during their fellowship that allow them to build new networks; however applicants are encouraged to request at the time of application all necessary resources.

## **Obligations of the Host Organisation**

### **Expectations of the Host Research Organisation**

It is expected that eligible Research Organisations who wish to submit fellowship applications to EPSRC will identify a number of suitable candidates as specified by the guidelines and within the defined research area and career space. Research Organisations should only put forward the most able candidates.



Research Organisations are expected to:

- Ensure that applications are aligned to a fellowship priority area
- Assist applicants to identify how they fit to the person specifications
- Ensure that candidates have selected the most appropriate resource packages for their career stage and intended project

In the case of applicants not holding an academic position, the host organisation must be prepared to give the individual all the support normal for an academic member of staff and put in place appropriate mentoring mechanisms to enable them transition to an academic position.

There will be an expected level of support that the Research Organisation would provide to its successful fellowship applicants, e.g. infrastructure, laboratory and office space, release from teaching and administrative duties, mentoring and equipment where appropriate.

Research Organisations may wish to show their commitment to candidates through additional support and resources. For example, provide a PhD student should the candidate be successful. For candidates without suitable supervisory experience, a PhD student should only be provided with the co-supervision of a mentor or other suitable senior academic.

## **Host Organisation Statement**

The Head of Department (through consultation with colleagues as appropriate) at the host organisation must complete a statement (two sides A4) in support of the application. The statement should be on Departmental or University headed paper, should be dated, and should clearly state the position held by the author (e.g. Head of Department of Electrical Engineering etc).

The statement must include details of the following considerations:

- The process that the host institution has used in order to identify which candidates it would be entering into the competition, why the candidate in particular has been chosen and why the career space for that candidate has been selected
- The statement should identify the key characteristics and skills that the candidate has, which the institution feels highlights the candidate's ability to succeed as an EPSRC fellow
- How the institution feels that the candidate fits to the various aspects of the person specification
- The level of support that the host institution will be giving the candidate both as a standard career development package that is open to all staff and additional support as part of the institution's backing of their candidate to be successful in the competition

In the spirit of openness and flexibility EPSRC will not be initially setting quotas for the number of applications that can be submitted by an organisation over time. However EPSRC will be monitoring the number and quality of applications received from institutions across the career stages and the priority research areas and it reserves the right to discuss ongoing submission behaviour with individual institutions and enforce a quota if necessary.

## **Transfer of Fellowships**

If a request is made to transfer a fellowship to another eligible host organisation, the following will apply:

- The fellowship will be transferred at the original value: re-costing will not be allowed
- The new Host Organisation will be required to provide a statement agreeing to honour the full range of support originally offered the fellow and the rationale for accepting the transfer

## Fellowship policy

Please note you may only apply for one EPSRC fellowship in any 12 month period so please consider carefully when you choose to submit your application.

If you are submitting fellowship applications to other funding bodies in parallel to this application, you should be aware that if you accept an EPSRC Fellowship, where 100% of your time is supported, you will be expected to turn down offers of other similar awards.

Fellows must devote a minimum of 50% of their time to the fellowship and must be actively working on their fellowship for the full duration of the award.

## Resubmissions

From the 1st April 2009, EPSRC no longer accepts uninvited resubmissions of proposals, regardless of any previous EPSRC correspondence. This policy applies to any proposal (including outlines and fellowships) that have been previously submitted to EPSRC through any of its funding routes.

This policy applies to all investigators on grant proposals (as well as outlines), including first grant and fellowship applicants, unless resubmissions are invited by EPSRC. Further details on our resubmission policy can be found on our website:

<http://www.epsrc.ac.uk/funding/apprev/Pages/resubmissions.aspx>

## Engagement with EPSRC

As an EPSRC fellow you will be expected to engage with EPSRC throughout the duration of your fellowship and act as an advocate for science and engineering. We will be issuing a statement of our expectations of EPSRC funded fellows in due course.

We will be working more closely with our fellows to strengthen relationships through working with them in cohorts. How we deal each cohort will differ. For example, for early career researchers the focus will be on mentoring and ensuring that they have the support and advice they need to establish themselves as leading researchers. For more established researchers we will be looking to involve them more in our advice streams. For all career stages we will be looking for the opportunities that cross-fertilisation of ideas brings.

## Change log

Name	Date	Version	Change
Anne-Louise Holloway	22 July 2011	1	N/A

## **Annex 1**

### **ENGINEERING**

#### **Water Engineering (Early Career and Established Career fellowships only)**

This Research Area encompasses design and optimisation of technologies relating to water resource management, treatment and distribution systems, including assessment and control of water quality and engineering research pertaining to the management and treatment of waste water and sewerage, including drainage systems.

We are looking to support fellowships in this area, but would highlight the need for broader thinking and multi-disciplinary working. In line with our strategy for Water Engineering we would also look to support fellows in development of creative and transformative new research ideas.

#### **Complex Fluids & Rheology (Early Career and Established Career fellowships only)**

This research area covers the characterisation, modelling, formulation and processing of complex fluids such as creams, pastes and emulsions, including understanding the effects of additives. Rheological properties and their measurement is included. The key focus of the area is the effect of the process on the resulting performance of the products. An example application of this area is polymer extrusion. Not included in this area are chemical structure/synthesis, or the fundamental understanding covered by soft matter physics; these aspects are covered by other research areas.

We are looking for fellows who are keen to address the long-term fundamental engineering challenges in this area, however it is expected, where appropriate, that industrial collaborators will be identified and engaged with throughout.

#### **Performance and Inspection of Mechanical Structures and Systems (Early Career and Established Career fellowships only)**

This research area is about the development, analysis, monitoring and optimisation of mechanical structures and systems. This theme includes both the experimental and modelling techniques that underpin our understanding of the performance of materials and mechanical structures, the development of non-destructive evaluation techniques, tribology and surface engineering, dynamics and transmission. Relevant elements of acoustics research are also included within this research area.

We are looking to support fellows who have core skills within this research area but who have a desire to work more broadly, with the ability to lead research teams in emergent multi-disciplinary challenges in areas such as Energy, Manufacturing and Healthcare Technologies. We would also encourage applicants to consider using their fellowship funding to facilitate spending time in relevant industrial settings as a means of extending their knowledge and ideas of where novel engineering can make a difference.

In addition to the core fellowship [Person Specification](#), in particular Engineering is looking for applicants who:

- Are able to show a high level of creativity and ambition in their engineering research ideas, are able to think long-term, and through high quality, truly innovative engineering research are able to develop new and emerging research programmes or to take more established fields in new and innovative directions;
- Have the desire to reach out across traditional interfaces to other research groups with appropriate basic scientific expertise, and develop potentially transformative research that adds to engineering knowledge;
- Will work to enhance national and international networking, and establish and maintain strong links with industry and users of research;
- Will be able to provide excellent advocacy, and inspirational leadership which extends beyond their immediate research environment into the wider UK research community.

To this end we would like to encourage applicants to think beyond their immediate research problem; carefully consider the following questions and the resources they would need to demonstrate the qualities detailed above:

- Do you have the ambition of building a team around you to deliver your research vision? Do you have a clear plan about how this might be achieved over the duration of the fellowship? What resources do you need to do this?
- Are you able to demonstrate a high level of flexibility, and can you identify how the award could be used flexibly and differently to deliver a step change in your career trajectory? Might this involve adopting or maintaining a more active role in the operation of your department with continued teaching and administrative duties?
- Would it be advantageous to have dialogue with the public concerning research issues and decision-making on the scope of projects? Would it be beneficial to have consultations on emerging research results and issues? How might you, through demonstration and explanation, make your research results and project outcomes available to a non-technical audience?

## Annex 2

### MANUFACTURING THE FUTURE

#### **Scale up methodologies for novel manufacturing products and processes (Early Career fellowships only)**

This is the overarching priority for Fellowships for the Manufacturing the Future theme, taking science – from across the EPS remit - from discovery towards application in real-world manufacturing systems.

#### **Manufacturing Informatics (Early Career fellowships only)**

The application of novel ICT tools and methodologies to manufacturing technologies, processes and systems.

#### **Engineering Design Methodologies for Emerging Technologies (Early Career fellowships only)**

Over the coming decades, society needs to create radical solutions to the challenges we face – we need new transportation systems, healthcare solutions, manufacturing processes and data management tools that are less demanding of natural resources, and more intuitive to use. The difficulty we face, however, is that our engineering artefacts predominantly conform to a series of “dominant designs”, thereby unduly focusing our engineering knowledge on a restricted number of ways of doing things. When we stray from these dominant designs, we are moving into the unknown.

There is a great emphasis today on the need for creativity and new thinking, both to address challenges such as the need for sustainability and for our firms to maintain their competitive edge. It is often not the shortage of ideas that is the problem, but their translation into engineered artefacts that are satisfactory for commercial markets. The same applies to new technologies – we have a constant stream of new technologies, but we face great difficulties in moving them from the laboratory to the market place. These are problems that engineering design can and should be addressing

In addition to the core fellowship [Person Specification](#), in particular The Manufacturing the Future theme is looking for applicants who:

- Are able to show a high level of creativity and ambition in their engineering research ideas, are able to think long-term, and through high quality, truly innovative manufacturing research are able to develop new and emerging research programmes or to take more established fields in new and innovative directions;
- Have the desire to reach out across traditional interfaces to other research groups with appropriate basic scientific expertise, and develop potentially transformative research that adds to manufacturing knowledge;
- Will work to enhance national and international networking, and establish and maintain strong links with industry and users of research;
- Will be able to provide excellent advocacy, and inspirational leadership which extends beyond their immediate research environment into the wider UK research community.

To this end we would like to encourage applicants to think beyond their immediate research problem; carefully consider the following questions and the resources they would need to demonstrate the qualities detailed above:

- Do you have the ambition of building a team around you to deliver your research vision? Do you have a clear plan about how this might be achieved over the duration of the fellowship? What resources do you need to do this?
- Are you able to demonstrate a high level of flexibility, and can you identify how the award could be used flexibly and differently to deliver a step change in your career trajectory? Might this involve adopting or maintaining a more active role in the operation of your department with continued teaching and administrative duties?
- Would it be advantageous to have dialogue with the public concerning research issues and decision-making on the scope of projects? Would it be beneficial to have consultations on emerging research results and issues? How might you, through demonstration and explanation, make your research results and project outcomes available to a non-technical audience?

## **Annex 3**

### **PHYSICAL SCIENCES**

#### **Research Areas**

##### **Theoretical Physics (Postdoctoral fellowships only)**

Specifically encompassing theoretical work in the areas of: magnetism, superconductivity, quantum fluids, lasers, plasmas, atomic, molecular and optical physics, surfaces and interfaces, and soft condensed matter physics.

##### **Graphene and Carbon-based nanomaterials (Early Career fellowships only)**

The synthesis, characterisation and theoretical understanding of graphene, carbon nanotubes and other carbon based nanomaterials. This area includes understanding the fundamental properties of carbon nanomaterials, development of new growth methods, understanding the influence of defects on properties and exploring possibilities for nanoscale carbon electronics. This area does not include device fabrication, carbon composite materials or materials processing as these are covered in related research areas. Priority to connect with Challenge themes.

##### **Catalysis (Early Career and Established Career fellowships only)**

Structural and kinetic studies to understand the molecular mechanisms involved in catalytic reactions, preparation of novel or improved catalysts.

##### **Quantum Technologies (Early Career and Established Career fellowships only)**

Quantum information processing; Quantum Metrology; Quantum error correction; Quantum optics; Cavity Quantum electrodynamics and Quantum state characterisation. It covers theory and experiment into Quantum mechanics.

Next generation quantum technologies will rely on our understanding and exploitation of coherence and entanglement. Utilising properties beyond the classical limit will transform metrology, communication, imaging, the simulation of complex systems, and ultimately computing. Success requires a deeper understanding of quantum physics and a broad ranging development of the enabling tools and technologies.

##### **Physical Sciences Grand Challenges (Early Career and Established Career fellowships only)**

To help address the identified physical sciences grand challenge areas we are inviting applications for fellowships. It will need to be made clear how the research would address the challenge particularly in relation to other relevant activity and what role the individual will play help to lead/push the Grand Challenge approach forward. Where new networks are key to addressing this challenge the leadership role of the fellow in helping to develop and building these will need to be outlined.

## Physical Sciences Grand Challenges:

- Dial-a- molecule  
(<http://www.epsrc.ac.uk/ourportfolio/themes/physicalsciences/introduction/Pages/chemscieng.aspx>)
- Directed Assembly of Extended Structures with Targeted Properties  
(<http://www.epsrc.ac.uk/ourportfolio/themes/physicalsciences/introduction/Pages/chemscieng.aspx>)
- Systems Chemistry: Exploring the Chemical Roots of Biological Organisation  
(<http://www.epsrc.ac.uk/ourportfolio/themes/physicalsciences/introduction/Pages/chemscieng.aspx>)
- Utilising CO<sub>2</sub> in Synthesis and Transforming the Chemicals Industry  
(<http://www.epsrc.ac.uk/ourportfolio/themes/physicalsciences/introduction/Pages/chemscieng.aspx>)
- Emergence And Physics Far From Equilibrium
- Quantum Physics for New Quantum Technologies
- Nanoscale design of functional materials
- Understanding the Physics of Life



## Annex 4

### MATHEMATICAL SCIENCES

#### Statistics and Applied Probability (All career stages)

This portfolio covers research in statistical methodology and applied probability and is generally defined as the development of mathematical models for investigating phenomena “involving some form of randomness or noise.” It covers a wide spectrum of research in stochastic and probabilistic modelling and inference in stochastic systems. Proposals should focus on the development of novel methodology.

In addition to the core fellowship [Person Specification](#) Mathematical Sciences would like to encourage applications from candidates who fulfil one or more of the following:

- Have the desire to reach across traditional interfaces between areas of statistics and applied probability to other areas of the mathematical sciences and other scientific disciplines.
- Are interested in establishing (or strengthening) links with industry or users of research.
- Are interested in engaging stakeholders, including members of the public, about the potential implications and applications of their research

To this end, we would like to encourage applicants to consider the following questions and the resources they would need to achieve the above:

- What other areas of the Mathematical Sciences (or, more broadly, of Science and Technology) could benefit from your research (and vice versa)? Do you have the ambition to be able to lead in the facilitation of this knowledge exchange? How could this fellowship benefit you in progressing towards this goal?
- How would closer connections with industry and users strengthen your research? In what way could this fellowship allow you to develop such links?
- Would it be advantageous to have a dialogue with the public concerning the research issues, or results emerging from this project? Do you aspire to making your research outcomes available to a broader (non-technical) audience? What resources would you need to develop these skills further?

## Annex 5

### INFORMATION AND COMMUNICATION TECHNOLOGIES

The ICT theme welcomes applications to the Early Career and Established Career stages. Five cross-ICT priorities have been identified and **all applications must show alignment to the ‘Working Together’ priority as a minimum requirement.** Fellowships are key EPSRC investments, and recipients should demonstrate a commitment to this priority which is beyond that expected from holders of other types of award. **Any application that is not considered to fully meet both the requirements and the spirit of the “Working Together” priority will be rejected prior to postal peer review.**

Potential candidates are strongly encouraged to consider priorities and the individual research area narratives when making their application <http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>. Candidates will need to demonstrate leadership to their own research area and provide evidence of how they will work with and influence other research areas, in a way that is appropriate to their career stage.

We have identified 5 cross-ICT priorities (**Early Career and Established Career fellowships only.**) These are:

- Many-Core Architectures and Concurrency in Distributed and Embedded Systems (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>)
- Towards an Intelligent Information Infrastructure (TI<sup>3</sup>) (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>)
- Photonics for Future Systems (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>)
- New and emerging areas in ICT (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>)
- Working Together (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/Pages/default.aspx>)

#### For Early Career fellowships

Fellowship candidates have to demonstrate alignment to the *Working Together* priority.

Candidates are also advised to consider ICT’s shaping strategy (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/strategy/Pages/default.aspx>), both in terms of Research Areas and cross-ICT priorities when writing their applications.

Applications will be considered from all ICT Research Areas, with the exception of CMOS Device Technology (<http://www.epsrc.ac.uk/ourportfolio/researchareas/Pages/cmos.aspx>) and Speech Technology (<http://www.epsrc.ac.uk/ourportfolio/researchareas/Pages/speech.aspx>), which have both been identified as areas for reduction).

We expect applications from those with the potential to become future research leaders and fellowships will be awarded to candidates with creative and ambitious research

visions. Where appropriate to the research, the applicant will be encouraged to build a team of talented individuals around them.

## For Established Career fellowships

Fellowship candidates have to demonstrate alignment to the *Working Together* priority.

Candidates are also advised to consider ICT's shaping strategy, (<http://www.epsrc.ac.uk/ourportfolio/themes/ict/strategy/Pages/default.aspx>) both in terms of Research Areas and cross ICT priorities when writing their applications.

CMOS Device Technology

(<http://www.epsrc.ac.uk/ourportfolio/researchareas/Pages/cmos.aspx>) is a Research Area that has been targeted for reduction. However, existing strengths in this area could refocus towards other research areas, for example Non CMOS Device Technology, and we will consider applications that aim to catalyse the movement of the CMOS research community in this way.

Speech Technology

(<http://www.epsrc.ac.uk/ourportfolio/researchareas/Pages/speech.aspx>) has also been targeted for reduction. The ICT theme has made recent large investments in this area and so will not accept applications from this Research Area at present.

Applications will be considered from all other ICT Research Areas. All applications at this stage will be weighed against the existing portfolio.

In addition to the core fellowship [Person Specification](#) for established career applicants, ICT specifically identify and comment:

In addition to the core fellowship [Person Specification](#), in particular ICT is looking for applicants who can set the research agenda by demonstrating leadership within the research community and evidence of pushing the boundaries of the research area or cross-ICT priority themes.

Consistent with the requirement to align to ICT's '*Working Together*' priority, candidates will be expected to demonstrate how they will influence ICT communities, instigating cultural shifts or new research directions (*maps on to the "Profile and Influence" and "Influential Team Leader" attributes*).

We expect applications from researchers who have the potential to profoundly impact and/or transform the ICT landscape. A high degree of risk in their approach is expected and welcomed. We will particularly encourage applications where the focus is on an individual with a creative approach wishing to develop pioneering ideas. These awards should allow fellows to pursue new research directions that have the potential to lead to high impact and/or disruptive outcomes. Research activity should not be the sole focus of applications. We will particularly encourage applications that allow a high intensity of focussed effort, within a relatively short timeframe (12 to 24 month effort).

## **Annex 6**

### **ENERGY**

#### **End-Use Energy Demand (Postdoctoral and Early Career fellowships only)**

This embraces energy efficiency measures, reduction in demand for energy, and reduction in demand for energy services / mobility - all of which will contribute to reducing carbon emissions from energy use. It includes research extending from the built environment to industrial processes and products, from materials to design and from markets and regulation to organisational and individual behaviour. Fellows should be engaged in multidisciplinary research embracing engineering (including ICT), social science (behaviour, practices, policies, economics) and multi-sectoral (buildings, transport, whole systems, industry)

#### **Carbon Capture and Storage (CCS) (Early Career and Established Career fellowships only)**

Research regarding the capture of carbon dioxide from power station and other sources, including air capture, transportation of the CO<sub>2</sub> and different utilisation and storage options, and related public engagement. Proposals should be related to multidisciplinary aspects of CCS. The majority of the research proposed should be in the engineering and physical sciences aspects of CCS.

#### **Marine Energy research (Early Career and Established Career fellowships only)**

Research relating to the following areas:

- Wave and/or tidal devices
- Wave/Tidal arrays
- Marine energy systems
- Interaction of devices/arrays with the marine environment

#### **Offshore Wind research (Established Career fellowships only)**

Research relating to the following areas

- Offshore wind devices.
- Offshore wind arrays.
- Offshore wind systems.
- Offshore device/array/systems interactions with the marine environment.

Applicants should show an alignment with our leading centres in their individual research areas and be based at departments who conduct multidisciplinary research in the context of the wider energy landscape.

## Annex 7

### HEALTHCARE TECHNOLOGIES

#### **Regenerative Medicine (Early Career fellowships only)**

Broadly covering tissue engineering, bio-reactors, biomechanics and novel biomaterials, monitoring, characterisation and manipulation of stem cells, manufacturing and the technology underpinning this area e.g. imaging and characterisation techniques.

#### **Diagnostic and therapeutics (Early Career fellowships only)**

Novel and transformative approaches to enable earlier diagnosis and treatment of health conditions, and greater preventative and point of care delivery of healthcare.

Many of the Healthcare challenges of the future will require innovative researchers able to cross disciplinary boundaries, work in broader systems-based projects and who can work flexibly. This will require collaborative working with industry, other disciplines and clinicians through the different stages along the innovation pathway.

For this reason in addition to the core fellowship [Person Specification](#) for Healthcare Technologies we expect fellows to be able to demonstrate strategic vision within their own research area which takes account of multidisciplinary and translational approaches; and to have the potential to transform thinking within the area. They will be expected to work, in particular, with other engineers and physical scientists, biologists, medics, clinicians and allied professionals. This could, for example, include greater alignment with existing centres and with centres for more applied research and development, funded by others such as industry, charities, and the NHS.