



Natural Environment Research Council

GUIDANCE FOR REVIEWERS OF DISCOVERY SCIENCE FELLOWSHIP PROPOSALS

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NERC Independent Research Fellowships (IRFs)

The Independent Research Fellowship scheme is designed to develop scientific leadership among the most promising early-career environmental scientists, by giving all Fellows five years' support, which will allow them sufficient time to develop their research programmes, and to establish international recognition. The primary criterion is the suitability of the applicant and their potential to become a future world class research leader. Track record should be assessed as appropriate to career stage and equal opportunities.

Some Responsive Mode Fellowship proposals will be linked to Research Programmes (for example, Omics Fellowships). The Steering Group will determine whether the proposal fits the remit of the Programme, so reviewers are requested to assess the quality of the applicant and the research excellence of the project alone (and not score "Fit to the Programme"). In a few cases, the proposal may have been considered out of remit for the Programme but the applicant is still being assessed for a Responsive Mode Fellowship.

Before you complete a review please ensure that you do not have a conflict of interest with the proposal. NERC maintains a conflicts of interests policy, available at **Annex A**, which aims to protect both the organisation and the individuals involved in providing it with knowledge and advice from any appearance of impropriety. We ask that you make yourself familiar with the policy and let us know as soon as possible if you have – or are unsure whether you have - any conflicts of interest with the proposal you have been asked to review.

Important information about completing the review

Your review form as completed (minus the confidential sections) is provided to the applicants as feedback. The review is also provided to the Research Organisation after the decision stage. The confidential sections of the form with your personal details, your expertise and the suggested reviewers will not be fed back to applicants or their organisation. **You should avoid comments in the non-confidential sections that could identify you, your level of expertise.** For example, if you need to cite your work then say "the" rather than "my" paper. All comments made should be in a manner suitable to be fed back to the applicant. If you think a particular comment could be misinterpreted or cause offence, please do not include it.

Please have regard to the Equality Act and be careful to avoid any unconscious bias in your assessment on the grounds of a protected characteristic such as age, disability, gender reassignment, marriage/civil partnership, pregnancy/maternity, race, religion/belief, sex or sexual orientation.

We are committed to the [San Francisco Declaration on Research Assessment](#). You should not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an investigator's contributions, or to make funding decisions.

For the purposes of research assessment, please consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, other commercial activities, etc.) in addition to research publications. You should consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

The content of a paper is more important than publication metrics, or the identity of the journal, in which it was published, especially for early-stage investigators. Therefore, you should not use journal impact factor (or any hierarchy of journals), conference rankings and metrics such as the H-index or i10-index when assessing UKRI grants.

In completing the review you will be asked to self-assess your level of expertise in the subject matter of the proposal. Please only complete the review if you consider that you have an appropriate level of expertise in the area i.e. 'medium' or 'high'.

For multidisciplinary proposals, it is unlikely that you will be familiar with all the aspects associated with the programme of research. You may have been approached as a reviewer because of your particular expertise in one aspect, and reviews will also be sought from experts in the remaining aspects. If you only feel confident to comment on particular elements of the proposal, please restrict your comments to these, and tell us what they are. This will greatly assist the moderating panel in placing your comments in context. Furthermore multidisciplinary research may necessitate a researcher moving disciplines. While it is important that you are convinced that the appropriate logistical support is in place (including training where necessary), you should take care to review the project not the applicant(s).

On a final note please ensure that you fully justify all scores given by providing clear and comprehensive comments in the comments sections.

Fellowship Scheme Assessment Criteria

In assessing Fellowship proposals, you are asked to consider two aspects of the proposal: the suitability of the applicant (primary criterion) and its Research Excellence (secondary criterion).

A. Suitability of Applicant

Score	Suitability of Applicant (Primary Criterion)
6	Outstanding The applicant is on a clear trajectory to become a world-class research leader.
5	Excellent The applicant is likely to become a world class research leader.
4	Very Good The applicant demonstrates potential to become a world class research leader.
3	Adequate The applicant is a solid research scientist but has demonstrated insufficient evidence of leadership potential.
2	Poor The applicant has demonstrated some scientific weaknesses and/or no evidence of leadership potential.
1	Very Poor The applicant has demonstrated substantial scientific weaknesses.
0	Non-Scoring Not enough information available to judge the quality of the applicant.

Your review should consider whether the applicant has:

- demonstrated their research vision and philosophy and outlined ways in which their research could be developed over the 5 year fellowship
- explained how they will contribute to the international research area and interact with the leading international groups in their field;
- shown a thorough grasp of their discipline and whether they offer considerable promise as an independent researcher.
- demonstrated, that if awarded a fellowship, they will be genuinely working independently of senior colleagues with whom they might have previously collaborated or for whom they might be working in a supporting role.

It should also be noted that:

- NERC wishes to support the most promising early-career environmental scientists and therefore, in assessing the applicant's track record, you should take due account of their career stage.
- Fellowships may be held full or part-time and NERC welcomes proposals from applicants who wish to work on a part-time/flexible basis in order to combine domestic responsibilities with a career. Reviewers should take into account career breaks and part-time working when reviewing the applicant's track record.

B. Research Excellence Criterion

Score	Research Excellence (Secondary Criterion)
6	Outstanding The proposed work meets outstanding standards in terms of originality, quality and significance and addresses extremely important scientific questions or will enable them to be addressed through technological development
5	Excellent The proposed work meets excellent standards in terms of originality, quality and significance and addresses highly important scientific questions or will enable them to be addressed through technological development.
4	Very Good The proposed work meets high standards of originality, quality and significance and addresses important scientific questions or will enable them to be addressed through technological development.
3	Good The proposed work is of merit, meets satisfactory standards of originality, quality and significance and addresses reasonably important scientific questions or will enable them to be addressed through technological development.
2	Not Competitive/ Modest The proposed work is potentially of some merit but overall is of inconsistent quality, significance and originality but could result in some useful knowledge.
1	Unfundable/ Poor The proposed work is unsatisfactory in terms of originality, quality and significance and is unlikely to advance the field.
0	Non-Scoring For special cases e.g. flawed in scientific approach, subject to serious technical difficulties, insufficiently clearly written that it cannot be properly assessed, or is duplicative of other research.

Your review should consider:

- the potential rewards of the project: the significance and quality of the work, and the scientific impact it will have in terms of enhancing or developing insights, developing the field and adding to knowledge or understanding in the area to be studied in a national or international context;
- the extent to which the research questions, issues or problems that will be addressed through the work are stated and their importance and appropriateness specified;
- how the proposal fits within the current state of knowledge and other work under way in the field;
- the appropriateness, effectiveness and feasibility of the proposed research methods and/or approach.

It should also be noted that:

- the Description of Proposed Research (part of the Case for Support) should provide more detail on the research proposed for the first three years of the fellowship. The research proposed for the final two years can be more speculative and reflect the applicant's research vision. However, sufficient information should have been provided to inform reviewers of the direction and feasibility of the research and enable appropriate costs to be requested on the proposal;

- the detailed research proposed (and costed) on the proposal should be manageable by the Fellow. Some fieldwork or technical assistance can be requested on Fellowship proposals, but the proposal must not include costs for a research assistant and should not assume access to PhD Students. As part of the demonstration of research vision, the applicant would be expected to outline their future research direction and how they would build their group through PhD studentship projects and Research grants, but costs should not be included on the Fellowship proposal.
- the existence of competing applicants elsewhere should not be seen as a reason for downgrading an proposal, unless the work proposed is a direct duplication of other work already being undertaken;
- your Research Excellence score should not be lowered because you think that the research project fails to fit fully within the NERC remit, as Discovery Science funding is unconstrained by strategic science priorities and can cross remit boundaries with other UK research councils;
- you should not be afraid of recommending innovative and speculative proposals, which may appear 'risky';
- for multidisciplinary proposals, it is unlikely that you will be familiar with all the aspects associated with the programme of research. If you only feel confident to comment on particular elements of the proposal, please restrict your comments to these, and tell us what they are; and
- for technology-led, observation-led, adventurous and multidisciplinary proposals, it is possible that a standard technique or method is being employed in a novel way or context. It is not appropriate to lower your Research Excellence score to reflect this element if it underpins an otherwise exciting and/or important piece of research.
- proposals do not need to be hypotheses driven and may instead focus on an exploratory approach, observation based science, or the development of a new technology. Certainty of outcome is not an indicator of excellence, but neither is an incremental approach necessarily an indicator that a proposal lacks excellence.

Fellowship Scheme Scoring System

It is important to stress that Suitability of Applicant is the primary assessment criterion and Research Excellence a secondary criterion. The panel will take this distinction between primary and secondary criteria into account when considering the scores you provide.

In addition to providing the two scores for Suitability of Applicant and Research Excellence, we ask you to provide comments on the following aspects:

Resources

Individual Aspects of Resourcing the Proposal

Are the specific funding requests in the following areas essential and sufficient for the proper conduct and exploitation of the research proposed?

- The equipment, consumables and other directly incurred costs such as travel and subsistence. Where equipment has been requested please comment explicitly on the viability of the arrangements described to access equipment needed for this project, and particularly on any university or third party contribution.
- Costs of collecting, establishing, providing or organising the necessary data and research materials.

- Resources devoted to maximising the scientific, societal and economic impacts of the proposed research.
- Access to institutional research facilities
- The overall length of time for the project

Please comment individually if you believe any of these might need to be curtailed or expanded.

Areas where you should not comment: The costs of particular resources are for resolution as to true economic cost between the research councils and other relevant bodies. You should not comment therefore upon:

- The level of estate costs in different institutions
- The level of indirect costs
- Charging rates of institutional or other research facilities which are not open market provisions
- Specific salary levels in individual institutions

Interview Questions

Please indicate any questions or issues that you think should be addressed by the applicant if they reach the interview stage.

Availability of Required Facilities and Support

Please comment on whether the facilities and wider support in the applicant's host department (including collaborative institutions) are appropriate for the fellowship.

There is an expectation for the host institution to provide support and mentoring to NERC Fellows to facilitate their development into future science leaders. The Head of Department statement is required to demonstrate:

- The availability of structured institutional support, including infrastructure and facilities, funds to support research, and access to PhD students;
- Support for personal development of the fellow, including mentoring, appropriate review and training courses

Please note that NERC encourages candidates to undertake their fellowship at a different institution from where they received postgraduate training or are currently employed. However, NERC recognises that there may be circumstances, where moving institutions is not appropriate, due to the institution providing unique facilities or opportunities, or for domestic arrangements. The choice of institution must be justified in the form.

Annex A

Handling Conflicts of Interest in Peer Review - Guidance for NERC Reviewers and Panel Members

A conflict of interest occurs when an individual involved in the assessment of a proposal for funding has a personal, professional or organisational relationship with the applicants, affecting their ability to undertake their role in an objective and unbiased way. If you are asked to take part in NERC peer review, either to review a NERC proposal or be a member of a NERC moderating or assessment panel then you need to be aware of the [NERC policy on conflicts of interest](#) for members of NERC boards, advisory groups and peer review panels.

The NERC policy defines a conflict of interest as being associated or involved in any way with:

- *An institution, department or individual that has submitted a funding proposal or would otherwise benefit from a decision and/or*
- *the development or implementation of proposals seeking Council funds or in the evaluation of research investments*

You will have connections and collaborations both formal and informal with a range of organisations and individuals. In order to help you interpret the broad definitions above, this advice aims to set clear expectations of the specific situations considered to represent a material conflict of interest, and when conflicts of interest need to be declared to NERC so that appropriate action can be taken.

NERC will try to avoid asking you to review or introduce proposals where you have conflicts that can be identified from our own records, but many will not be obvious to us. The final responsibility for identifying and reporting conflicts of interest must therefore rest with the individual. Timing is very important as late notification is much more difficult to manage. A conflict for a panel member identified when the panel is being set up is straightforward to manage, the same conflict identified on the day of the meeting can create major problems, so please check the proposals assigned to you carefully as soon as you receive them.

What Constitutes a Conflict of Interest?

Due to the complexities of relationships between researchers it is challenging to provide definitive and exclusive definitions. Some cases will be clear cut, others will be less so and will require a judgement call. We expect researchers who work in the same field to know each other, and this doesn't bar you from commenting on their proposals. The test should be 'will a neutral observer have confidence in the impartiality of any advice provided' and in any case where there is significant doubt the relationship should be treated as a conflict.

The following are examples of conflicts of interest considered material by NERC for a proposal you have been asked to review or introduce:

	Conflict	Action Required
1	You are a named investigator, staff member or project partner involved in the proposal or have signed a letter of support	NERC should identify these conflicts please tell us if an error has been made

2	<p>You have a formal affiliation to any Research Organisation or Project Partner organisation involved in the proposal.</p> <p>This generally means you are a current member of staff at the organisation. You also have a formal affiliation if you are a Professor Emeritus, or Visiting Professor, or have signed a contract of employment or receive personal remuneration in excess of £5,000 per annum from the organisation.</p> <p>For Fellowship proposals conflicts apply to both the organisation where the applicant is currently based and the organisation where the fellowship would be held.</p> <p>[Association with an organisation that has provided a letter of support but is not a Project Partner is not a conflict]</p>	<p>NERC should identify staff conflicts please tell us if an error has been made. Please inform us of other relationships e.g. visiting professor which may not be obvious to us.</p> <p>If you are moving to a new organisation please inform us as this will create new conflicts.</p>
3	<p>You are directly involved in the work proposed and would benefit from it being funded and/or have assisted the applicants with their proposal for funding and/or have agreed to be a member of an advisory committee connected with the project.</p>	<p>Please inform us NERC may not have received complete information.</p>
4	<p>You have an existing business or professional partnership with any of the investigators or staff named in the proposal</p>	<p>Please inform us NERC does not hold this information.</p>
5	<p>You are a close relative - spouse, child, sibling or parent - of any of the investigators or staff named in the proposal.</p>	<p>Please inform us NERC does not hold this information.</p>
6	<p>You are a close personal friend of any of the investigators or staff named in the proposal and think that might affect your judgement or be seen as doing so by a neutral observer familiar with the relationship.</p>	<p>Please inform us NERC does not hold this information.</p>
7	<p>You are in close regular collaboration with any of the investigators or staff named in the proposal to an extent where you feel uncomfortable being involved in the discussion or you feel unable to give an unbiased opinion.</p>	<p>Please inform us NERC does not hold this information.</p>
8	<p>On Fellowship applications: you have been the applicant's supervisor within the last eight years.</p>	<p>Please inform us NERC does not hold this information.</p>
9	<p>You have had any involvement in the development of the proposal, at any stage of its preparation, including providing comments or advice to the applicants.</p>	<p>Please inform us NERC does not hold this information.</p>

Managing conflicts

Reviewers - NERC aims to avoid selecting reviewers where a conflict of interest is clear or applicants have requested that specific reviewers are not used. This will include anyone with a personal or organisational association with the proposal identifiable from the information available to NERC. In the peer review of funding calls with a specific research scope NERC will also avoid selecting reviewers that have submitted a proposal to the same call. Anyone asked to provide a review should check to ensure they have no other material conflicts, if so they should decline the request citing 'conflict of interest' as their reason. Please contact NERC quickly for advice if you are unsure. Where a material conflict is identified after a review is submitted that review will be classed as unusable and excluded from the process.

Panels - Panel members are reminded to identify any material conflicts of interest, especially with proposals they have been asked to introduce, as early as possible in advance of the meeting. Where a conflict of interest is identified, panel members' meeting papers will be edited to remove relevant information regarding the conflicted proposal and the member will be asked to leave the meeting room when it is discussed. The meeting record will note all instances where a conflict of interest was identified and managed at a panel. For some panels, particularly where these are interview panels, the standard practice of members leaving the meeting for a conflicted proposal may not be practical. However they will never participate in the discussion of that proposal, or be permitted to influence the final ranking of a proposal where such a conflict exists. In the peer review of calls with a specific research scope NERC will avoid appointing anyone to a panel that is a named investigator on any proposal to be considered by that panel. For Discovery Science panels, where the research scope can be broad, NERC will only involve applicants in panels when their expertise is critical, the meeting procedures will prevent them being able to influence or receive immediate information on the score or ranking of their proposal.

NERC staff

NERC staff may also have connections with applicants that constitute a conflict of interest. Although their opportunity to influence outcomes is limited, in such circumstances staff will not be involved in reviewer selection or any decision stage for proposals where a material conflict exists.