



**Biotechnology and
Biological Sciences
Research Council**

BBSRC Guidance Notes for Reviewers Using the Je-S System

Table of Contents

1	Key points to note	2
2	Reviewer self-assessment	2
2.1	Knowledge of the applicants	2
2.2	Your area of expertise.....	2
3	Overall assessment	3
4	Application assessment	4
4.1	Scientific excellence.....	4
4.2	Timeliness and promise	5
4.3	Strategic relevance	5
4.4	Economic and social impact.....	5
4.5	Value for money.....	6
4.6	Staff training potential of the project.....	6
5	Specific comments.....	7
5.1	Technical issues	7
5.2	Data sharing	7
5.3	Research involving animals.....	7
5.4	Ethical or societal issues raised by the proposed work.....	8

1 Key points to note

These notes provide reviewers with specific guidance for the completion of the reviewer form. They should be read in conjunction with the [reviewer protocols](#), in the Je-S Handbook. Specific guidance is available for each section of the reviewer form that you are asked to complete.

In completing your review please consider the following general guidance. This helps ensure consistency and fairness in the review process. It also makes it easier for applicants to respond to your comments and for the panel to assess how complete and convincing the applicants responses are.

- Assess the proposal based on the information provided by the applicants, using your knowledge of the field
- Ensure you provide clear and concise comments and recommendations
- Provide a full justification for your review, indicating the strengths and weaknesses of the proposal
- Raise issues or concerns with the proposal in the form of explicit questions for the applicants to respond to where possible
- Be aware that not everyone reading your comments will be a specialist in the specific research field

Your review will be provided, unattributed, to the applicants who will be allowed the opportunity to respond to the review.

2 Reviewer self-assessment

Comments in this section will not be sent to the applicant but will be provided to the Peer Review Committee or Panel.

2.1 Knowledge of the applicants

Indicate briefly in what capacity you know the applicant(s) and their work. If there are any potential conflicts of interest, please see the UKRI policy on Declarations of interest <https://www.ukri.org/publications/ukri-declarations-of-interest-policy-and-guidance/>

2.2 Your area of expertise

Please comment on your overall confidence in reviewing the proposal and indicate the areas of your expertise that are relevant to your review. Please also indicate any aspects of the proposal that you consider fall outside your expertise, or that would

benefit from more specialist expertise. This is particularly helpful in ensuring a holistic assessment of multidisciplinary proposals and will enable BBSRC to select additional referees in these areas. It also allows the assessment panel to understand which aspects of the proposal your comments and score relate to.

3 Overall assessment

Please indicate an overall score for this application, taking into account the definitions of each score. Please tick one box only.

Score	Description	Definition
6	Exceptional Fundable	Work that is at the leading edge internationally, addresses all of the assessment criteria, and meets the majority of them to an exceptional level. Likely to have a significant impact on the field.
5	Excellent Fundable	Work that is of a high international standard, and addresses and meets the majority of the assessment criteria to a very high level. Will answer important questions in the field.
4	Very Good Fundable	Work that is internationally competitive and meets the majority of the assessment criteria to a high level. Will advance the field.
3	Good Fundable	Work that has merit and meets the majority of the assessment criteria to an adequate level. Likely to advance the field.
2	Not Competitive Not Fundable	Work that is potentially of some merit, and meets some of the assessment criteria to an adequate level, but which is not internationally competitive. Unlikely to advance the field significantly.
1	Unfundable Not Fundable	Work that is of no significant scientific merit, flawed, or duplicative of other research, or for which the applicants do not present evidence of a satisfactory track record, and which does not meet the majority of the assessment criteria to an adequate level. Unlikely to advance the field.

4 Application assessment

ALL comments in this section will be sent, unedited, to the applicant. Your identity will not be revealed.

4.1 Scientific excellence

Comment on the extent to which the proposal meets the highest international standards of current research in its field. High performance against this factor will indicate a proposal of the highest standard, competitive with the best activity anywhere in the world.

It is not necessary to extensively restate the proposal other than as an aid to making critical comment.

The aims and objectives of the proposal, including the significance of the work and extent to which it meets the highest international standards in its field

Comment on whether the aims and objectives are clear, understandable, and worthwhile.

Comment on whether the proposed work is appropriately justified, such that it is clear the aims and objectives will be met.

Comment on the intended outputs of the proposal and their potential significance. Examples of outputs may include new ideas, discoveries, datasets, techniques, software and tools.

The strengths and weaknesses of the proposed programme of work

Identify and comment on the strengths and the weaknesses of the proposal.

Explain which should be accorded greater or lesser significance and why, including any issues that should be explicitly addressed by the applicants.

Feasibility of the work programme given the track-records of the applicants, and any risks and proposed mitigations identified by the applicants

Comment on the skills and experience of the investigator(s) and team (including project partners). You should focus on the capability to deliver the work they are proposing, using only directly relevant information provided by the applicants.

We are committed to support the recommendations and principles set out by 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 scoring decisions. Please consider the value and impact of all research outputs (including datasets, algorithms, models, software/ code, 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.

Furthermore, when undertaking your assessment, you should be mindful of the unequal impacts that COVID-19 related disruption might have had on the track record and career development of individuals included in the proposal.

Comment on any risks and proposed mitigations of those risks that the applicants have identified in their proposal.

4.2 Timeliness and promise

Comment on the extent to which the application is particularly appropriate at the present time or offers longer-term benefits over and above the direct value of the proposal.

Timeliness factors include:

- addressing a subject of pressing topicality or intense international competition
- exploiting an opportunity available for a limited period, such as access to particular data, samples or facilities or the availability of a particular person.

Promise factors include:

- the opportunity for all team members to work in an area of future importance for their career development
- the opportunity to secure the availability of or access to data or materials for future work
- the development of techniques and tools of broader future application.

4.3 Strategic relevance

Relevance to industry and other stakeholders

Please comment on any relevance the application may have in providing underpinning science which meets industrial needs, or addresses the potential policy requirements for other BBSRC stakeholders. This will be particularly relevant for applications with an industrial collaborator. In such applications please review the industrial involvement carefully.

Relevance to BBSRC strategy

Please comment on whether and to what extent the proposal addresses the strategic and policy priority areas of BBSRC. Key information about BBSRC strategy can be found below.

Developed by BBSRC, the [Forward Look for UK Bioscience](#), identifies the direction of travel for UK bioscience and the high-level priorities that will ensure the continued health of the discipline, while also setting out where biotechnology and the biological sciences can have the most impact in addressing some of the 21st Century's greatest challenges around ensuring food security, clean growth and healthy ageing.

The Forward Look for UK bioscience is structured around three themes that outline key challenges for the years ahead:

- Advancing the frontiers of bioscience discovery
- Tackling strategic challenges
- Building strong foundations.

BBSRC also has a set of responsive mode priorities that reflect topics or activities within BBSRC's broader strategic areas that we particularly wish to encourage and promote. Full descriptions can be found on the BBSRC [website](#).

4.4 Economic and social impact

The extent to which the output of the proposed programme of work will contribute

knowledge that shows direct potential for economic return or societal benefits to the UK. A key element in this factor will be the arrangements that exist within the project to achieve the necessary interaction with relevant users that will ensure that these aims are realised.

To assess impact, you should consider the extent to which the applicant has identified appropriate routes, stakeholders and/or users for the outputs generated from their proposal; and the extent to which it is established why these routes are the most likely to deliver impact from their work. A key element in this will be the quality of specific activities that are outlined in the proposal to maximise the potential of impact associated with the outputs of the proposal. These considerations should be factored into your judgement of the Social and Economic Impact criterion.

4.5 Value for money

Comments are sought on the extent to which the resources requested, relative to the anticipated scientific gains, represent an attractive investment of BBSRC funds.

UK Government funding for university research is provided through the Dual Support mechanism, in which underpinning and infrastructure funding comes from the four regional Funding Councils, and the Research Councils provide grants for the additional costs of specific projects.

There may be factors which make an application particularly good or poor value for money. For example, an application attracting a high level of industrial or other external support, an application with a high level of new equipment or infrastructure investment from university funds, or an international or inter-institutional collaboration which shares expensive costs very effectively would do well under this criterion. Conversely, an application which duplicates resources available elsewhere or seeks to compete rather than collaborate with other groups might not, depending on the circumstances.

Resources under Directly Incurred, Directly Allocated (except estates costs) and Exceptions can be assessed for their necessity and appropriateness. Estates and Indirect costs must not be considered, and the overall costs of the grant should not normally affect your review of its quality. Referees may comment on the amount of PI/Co-I time requested, but not on the associated costs.

Particular care is needed in connection with reviewing the salary levels requested for Research Assistants (both named and unnamed). [BBSRC's Grants Guide](#) (section 5.9) states that applicants should seek to determine the extent to which market conditions make it difficult to recruit staff of appropriate quality in areas of high market demand and therefore require an uplift from normal salary levels. Salaries for research staff should take account of both the skill levels needed for the work and any shortages or difficulties in recruiting staff in particular areas such as in recognition of the competitive market for staff with strong quantitative expertise

Data-driven research and the development of associated methods, tools and resources are an integral part of contemporary bioscience. As such, proposals should be fully scoped and are expected to include the necessary full or partial roles associated with professional support for data-intensive bioscience, such as for data analysis and management. This can include support through the use of shared facilities and technical professionals such as Research Software Engineers where appropriate.

4.6 Staff training potential of the project

Where resources are requested for postdoctoral or other research and technical staff,

comments are sought on the extent to which the proposed project will provide training and development opportunities of benefit both to the individual(s) employed, and to the wider science base beyond the completion of the specific project. For example, the project may give staff the opportunity to acquire new skills that are in demand.

5 Specific comments

Please identify specific issues which have influenced your review of this proposal and which you wish the applicant to address before the grant funding Committee meets.

5.1 Technical issues

Comment on any technical issues not mentioned elsewhere yet that you wish to draw to the attention of the applicant, for them to address.

5.2 Data sharing

Comment on the data management plan and whether the proposal has an appropriate plan for managing data through its lifecycle, e.g. from primary generation through to data deposition/ sharing/ reuse. The data management plan should encompass all of this, as exemplified by the bullets below.

Research data could be quantitative or qualitative, examples include sequencing data, images, models, software, scripts, protocols, and procedures.

- Data areas and data types – the volume, type and content of data that will be generated e.g. experimental measurements, records and images;
- Standards and metadata – the standards and methodologies that will be adopted for data collection and management, and why these have been selected;
- Relationship to other data available in public repositories;
- Secondary use – further intended and/or foreseeable research uses for the completed dataset(s);
- Methods for data sharing – planned mechanisms for making these data available, e.g. through deposition in existing public databases or on request, including access mechanisms where appropriate;
- Proprietary data – any restrictions on data sharing due to the need to protect proprietary or patentable data;
- Timeframes – timescales for public release of data;
- Format of the final dataset.

Bioscience is increasingly benefitting from access to and re-use of data to accelerate discovery and where possible data sharing should take place in publicly funded research. Applicants may claim justifiable costs associated with research data management, such as data sharing or curation activities, or associated staff training requirements.

5.3 Research involving animals

BBSRC works in partnership with the National Centre for the Replacement, Refinement

and Reduction of Animals in Research (NC3Rs) and other funders, with regard to responsibility in the use of vertebrate animals in bioscience research. Details of expectations can be found in the document [Responsibility in the use of animals in bioscience research](#). For each proposal that uses animals reviewers are asked to assess whether:

- the proposal can be undertaken without the use of animals
- the potential benefit justifies the possible adverse effects to the animals
- the numbers of animals to be used is appropriate
- the species is justified.

These requirements apply whether or not the animals are to be purchased with funds requested within the proposal itself.

5.4 Ethical or societal issues raised by the proposed work

Comment on any ethical or societal issues raised by the proposed work, giving consideration to the following:

- Is there a clear need for this proposal? Could the purpose be perceived to be trivial?
- Does the purpose imply a lack of respect for human/animal life, or the environment?
- Is there a potential for the outcomes of the proposal to be misused (e.g., research tools, therapeutic or agri-food developments that could also be used in bioterrorism)?
- Could there be a perceived threat to consumer choice or human dignity?
- Could the proposal generate information that could be used to discriminate against ethnic groups or other under-represented groups, developing countries etc.?
- Does the risk of the proposal (e.g., to the environment or food safety) outweigh any benefit?
- Will the outcome benefit the public, or will it only benefit e.g., the industrial/business community?
- Is there a potential for public concern about the proposal?