

Guidance for Peer Reviewers

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If you have any questions about the information contained in this guide, or if you would like this guide in a different format, then please contact peer.review@mrc.ukri.org.

Information rights legislation

All information we hold, including information around peer review, is subject to the Data Protection Act and the [Freedom of Information Act \(FOIA\)](#). All requests are considered on a case by case basis and in some cases it might be necessary to seek your view on releasing information relating to the review you have provided.

1. Guidance for Peer Reviewers

The Medical Research Council (MRC) improves human health through world-class medical research. We fund research across the biomedical spectrum, from fundamental lab-based science to clinical trials, and in all major disease areas. We are a non-departmental public body funded through the government's science and research budget. We invest in research on behalf of the UK taxpayer.

Peer review is the cornerstone of the work of the MRC as a funding organisation, and the time and effort that peer reviewers give to the peer review process is invaluable in helping our research boards and panels make funding decisions. MRC is committed to the [UKRI principles of assessment and decision making](#).

All applications submitted to us are scrutinised by independent experts who consider the importance, scientific potential and cost-effectiveness of the research concerned.

We use a two-stage peer review process for grants and fellowships.

- In the first stage, we aim for three reviews for each application. More reviews may be sought for larger-scale, more complex or interdisciplinary applications. Occasionally it may not be possible to obtain three external reviews due to pressures on the academic community. With the support of our expert board and panel members a funding decision will be taken if there is sufficient evidence.
- The second stage is the MRC research board or panel's assessment and funding decision. This usually involves two steps: a triage (sift or shortlisting) to select the most competitive applications to go through to a meeting where the final funding decision is taken.

This guidance is aimed at peer reviewers taking part in the first stage of this process. Board and panel members will be provided with separate guidance. This guidance should be read in conjunction with the [tackling bias in peer review: guidance for peer reviewers](#).

2. Conflicts of interest

The integrity of peer review is of paramount importance. This means that any personal interests as a reviewer or board or panel member must never influence, or be seen to influence, the outcome. We consider that a conflict of interest exists where:

- the applicant is a close friend or relative
- you are directly involved in the work the applicant proposes to carry out
- you may benefit financially from the work (for example if you are involved with a company acting as a project partner)
- you work in the same research organisation as an applicant, co-applicant or project partner
- you work closely with the applicant, (for example, as a co-author or PhD supervisor), or have done within the last five years.

This is not an exhaustive list. So if you believe you may have a conflict of interest or are in any doubt as to whether or not you should review an application, please contact

us peer.review@mrc.ukri.org. It is important that you ensure you are eligible to review the application before undertaking the review.

3. How to write and submit your review

Reviewers are chosen for their expertise in a particular field of research. Some funding opportunities may require reviewers with different levels of expertise or particular skill-sets. In certain circumstances we may ask a reviewer to consider a single aspect of an application, for example a particular methodological approach or [one strand of a multi-faceted application](#).

If you are approached to provide a review, you will receive an email containing the details of the application. You will normally be asked to complete the review online, using the [Joint electronic Submission System](#) (Je-S). Logging into Je-S gives access to all the information you need to carry out your review. You will be able to see the application documents including the case for support, justification of resources, data management plan, CVs and other documents.

3.1 Writing a good review

The review form will contain various questions about the proposed work and your assessment of it. Good reviews are invaluable in helping the board or panel make funding decisions. They may use your review to help decide whether the application should be discussed at the full meeting or be rejected at triage/shortlisting. Your constructive feedback will be shared anonymously with the applicant, which could help to improve their research. For those progressing to the next stage, the applicant will have the opportunity to respond to questions you raise.

Do:

- read the [assessment criteria](#) and [scoring matrix](#)
- provide a balanced assessment of the application in the context of any disruptions to the applicant or team caused by the COVID-19 pandemic
- provide clear and concise comments and objective criticism
- clearly identify strengths and weaknesses
- provide justification for your comments and the score, whether you are supportive of the application or not
- be aware that not everyone reading the comment will be a specialist in that field, include references and be aware of [bias](#).

Don't:

- make it personal
- reiterate the application or restate the assessment questions
- penalise the applicant or team for disruptions to their careers resulting from the COVID-19 pandemic
- include anything in the assessment that will identify you such as references to your own work, where you have worked or who you have worked with
- exceed the space restriction in Je-S (4000 characters per section), otherwise the rest of your review will be lost

- allow your review to be influenced by bias for your own field of research.

Questions to ask yourself:

- how important are the research questions, or gaps in knowledge, that would be addressed?
- are the researchers up to the job? Do they have the right team, experience and infrastructure? Are they at the forefront nationally or internationally. MRC is committed to the San Francisco Declaration on Research Assessment (sfdora.org/). Please ensure you refer to the [responsible use of metrics](#).
- have you appropriately considered any unequal impacts of the [COVID-19 pandemic](#) described by the applicant?
- what are the strengths and weaknesses?
- is the methodology and experimental design clearly set out and justified? Are the methods appropriate? What could they do better? Are there alternative approaches?
- are there major flaws or weaknesses?
- are there any [ethical issues](#)?
- does this application represent good value for money?

3.2 Timescales

If you cannot comment within the suggested timescale, please confirm this immediately so we can discuss extending the deadline or consider approaching another reviewer. You can contact our board and panel teams, see details below.

3.3 After you submit your review

Your review is passed to the board or panel members, who will use it to inform their assessment of the application. In most cases but not all¹ this involves a triage or shortlisting after which some applications are rejected, followed by a meeting where the most competitive applications are discussed, and a final funding decision is made.

Your review will be made available to the applicant. In most cases², those applicants that pass-through triage will have the opportunity to respond to reviewers' comments before the board or panel meeting.

You will be informed when an application you have reviewed is successful. The [outcomes of all funding decisions](#) will be published on the MRC website soon after the board or panel meeting.

3.4 Review queries

- To ask a question about the peer review process, email: peer.review@mrc.ukri.org
- To ask a question about Je-S, email: jeshelp@je-s.ukri.org or call: 01793 444164. The help desk is staffed Monday to Thursday 8:30 to 17:00 and Fridays 8:30 to 16:30,

¹ Excludes [DPFS](#) and some MRC strategic calls

² Excludes [Fellowships](#), [DPFS](#) and some MRC strategic calls

excluding bank holidays and other holidays. Further guidance on using Je-S can be found on the [Je-S help pages](#) or by contacting the Je-S help desk.

3. Assessment criteria

The assessment of any research application is based on three core criteria:

1. **Importance:** how important are the questions, or gaps in knowledge, that are being addressed?
2. **Scientific potential:** what are the prospects for good scientific progress?
3. **Resources requested:** are the funds requested essential for the work, and do the importance and scientific potential justify funding on the scale requested? Does the application represent good value for money?

We also ask reviewers to consider other aspects of the research, including the potential impact and pathways to achieving this, [ethical issues](#), appropriate use of [animals](#) and/or [human tissue](#), methodology and experimental design and data management plans.

MRC's policy, [Embedding Diversity in Research Design](#), requires applicants to appropriately justify or consider diversity and inclusivity in the design of research involving human participants, data, or samples. We ask reviewers to comment on whether diversity and inclusion has been considered in the study population, and if not, whether there is a clear justification for this.

For applications involving animals, including human and animal tissues and cells, MRC requires single-sex studies to provide appropriate justification, as part of the [Sex in experimental design requirement](#).

When undertaking your assessment of the research, you should consider the unequal impacts that [COVID-19-related disruption](#) described by the applicants might have had on the research, track record and career development of those individuals included in the application.

Each of the different funding opportunities we operate will have a set of more detailed criteria and you should read and consider the set for the opportunity you are reviewing for. The opportunity will be specified within the application form.

- [Research Grant Assessment Criteria](#)
- [New Investigator Research Grant \(NIRG\) assessment criteria](#)
- [Programme Grant assessment criteria](#)
- [Partnership Grant assessment criteria](#)
- [Developmental Pathways Funding Scheme \(DPFS\) assessment criteria](#)
- [Pre-doctoral Fellowship assessment criteria](#)
- e.g. Clinical Research Training Fellowship (CRTF)
- [Post-doctoral Fellowship assessment criteria](#)
e.g. Skills Development Fellowship, Career Development Award (CDA), Clinician Scientist Fellowship (CSF), Senior Non-Clinical Fellowship (SNCF), Senior Clinical Fellowship (SCF)
- [Clinical Academic Research Partnership assessment criteria](#)

4. MRC Remit and multi/interdisciplinary applications

If the Medical Research Council (MRC) has invited you to review an application, please respond on the assumption that:

- the application falls predominantly within our remit
- discussions with other research councils have taken place if needed.

Do not be tempted to adjust your comments or score downward because you do not think that the research fits fully within MRC's remit.

4.1 Applications spanning remits

All research councils encourage research that adds value by linking science across our remits. Research applications that need to span the distinct remits of different councils will be handled by one lead council, with others contributing to the review and funding as needed.

If invited to review multidisciplinary or interdisciplinary applications, you may not be familiar with all aspects of the research. You may have been approached as a reviewer:

- because of your particular expertise in one aspect
- because of your experience of cross-disciplinarity.

If you only feel confident to comment on particular elements of the application, please restrict your comments to these, and tell us what they are in the declaration of interests section in the Joint Electronic Submission (Je-S) system.

Reviews will also be sought from experts in all aspects to ensure appropriate coverage.

Cross-disciplinary applications should clearly articulate the added value of the approach, presenting an explicit view of how they will gain 'more than the sum of their parts' from the collaborations.

4.2 Reviewers considerations

We do not necessarily expect a step-change in state of the art for each individual discipline. The combination of the disciplines may be the novelty. Reviewers should apply a broad perspective to consider this, even if an expert in only one aspect of the application.

Multidisciplinary and interdisciplinary research may necessitate a researcher moving disciplines. Whilst it is important you are convinced that the appropriate logistical support is in place (including training where necessary), you should take care to review the project and not the applicant or applicants.

Reviewers are encouraged to consider more deeply:

- the benefits of a cross-disciplinary approach
- the appropriate disciplines to involve
- the integration required
- how it can be achieved.

While MRC's role is not to support industrially-led research, MRC strongly encourages academic-industry collaboration and will separately review any collaboration to ensure that MRC support would be appropriate.

Please do feel free to comment if you think the project merits MRC support. Or for example, alternatively if it should be supported directly by industry or through other means, such as via Innovate UK. But do not modify your overall score as a result.

4.3 Further concerns about the acceptability of an application

If you have any queries about the acceptability of an application which are not covered in this MRC guidance, please contact the relevant board or panel team via email: peer.review@mrc.ukri.org.

5. Tackling Bias in Peer Review

As a peer reviewer, you must ensure you maintain objectivity in your assessment of applications.

Part of your role is to be aware of potential biases and the impact these may have. Reducing and challenging bias in peer review is important to:

- ensure the integrity of the process
- help advance equity, diversity, and inclusion in our scientific communities.

5.2 Guidance on tackling bias

We provide tips and strategies to help you reflect on different biases and guidance on how to mitigate them. [Peer reviewer guidance on tackling bias](#).

5.3 How MRC is addressing bias

MRC has also put in place steps to overcome bias throughout the whole peer review process. These include, but are not limited to:

- providing clear assessment, scoring criteria and processes
- monitoring diversity on our boards and panels and in our award rates
- introducing 'active bystander champions', and cultivating an active bystander culture where everyone is empowered to question bias within reviews and our boards and panels

Learn more about [equality, diversity and inclusion at MRC](#).

6. COVID-19 Guidance

UK Research and Innovation (UKRI) recognises that the COVID-19 pandemic has caused major interruptions and disruptions across our communities, and is committed to ensuring that individual applicants and their wider team are not penalised for this. We expect that most researchers have been affected during this time.

6.1 Impacts of COVID-19

We have encouraged applicants who have been disproportionately affected to outline the impacts on their project, programme or track record. Some examples of how applicants might have been affected are below:

- change in personal circumstances, such as illness or additional caring responsibilities
- clinical responsibilities (for instance working on the frontline or being required to back-fill posts) and any ongoing impacts during the transition back to research
- impact on access to facilities and normal work environment or furlough

- impact on research (including the hiatus of research within the NHS) and the production of preliminary data, development of collaborations, or methodological or technique training and experience
- impact on publications or other outputs, including markers of esteem, such as panel membership, presentation invitations and conference participation
- any other way in which the pandemic or its impact has affected the applicant, their career, or their ability to deliver their research.

Applicants have the option to highlight this within their CV and complete an additional annex which forms part of the case for support. Further to the introduction of this annex, UKRI has signed the [cross-funder statement on COVID-19 \(PDF, 475 KB\)](#) which reinforces the approach UKRI has taken since the start of the pandemic.

Applicants have been advised that their applications should be based on the information available at the point of submission and, if applicable, the known application-specific impacts of COVID-19 should be accounted for. Where known impacts have occurred, these should have been highlighted in the application, including the assumptions and information at the point of submission. Applicants are not required to include contingency plans for the potential impacts of COVID-19.

When undertaking your assessment of the research project, you should consider the unequal impacts that COVID-19-related disruption might have had on the track record and career development of those individuals included in the proposal, and you should focus on the capability of the applicant and their wider team to deliver the research they are proposing. You should assess the project as written; any changes that the project might require in the future will be resolved as a post-award issue by UKRI if the project is awarded funding. Potential complications related to COVID-19 should not affect your assessment or the score you give the project.

6.2 COVID-19 considerations for reviewers

In your assessment you should consider:

- those most impacted by COVID-19 pandemic, including:
 - those with caring responsibilities
 - those who have experienced health challenges as a result of the pandemic, either themselves or their families
 - front line clinicians and those from emergency, infectious disease and intensive care specialities
 - wet lab researchers and those working with *in vivo* models
 - researchers from countries whose infrastructure has been hardest hit by the pandemic or those with the tightest lock-down rules or controls, and those who collaborate with such researchers
 - researchers who have been redeployed towards COVID-19 activities or where their research field has been deprioritised.
- track records, in the context of the applicant's individual circumstances, the opportunities they have received and disruptions they have experienced. You should consider the unequal impact that COVID-19 disruptions might have had on the track record and career development of those individuals included in the proposal, please focus on the capability of the applicant and their wider team to deliver the research they are proposing.

- expectations regarding the development of the application, including the extent to which preliminary data has been provided, should be considered in the context of how the applicant has been impacted by the pandemic.

Potential complications related to COVID-19 should not affect your assessment or the score you give the project.

7. Other considerations when reviewing

7.1 Responsible use of metrics

MRC are committed to support the recommendations and principles set out by the [San Francisco Declaration on Research Assessment \(DORA\)](#). 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 purpose of research assessment, please consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, and other commercial activities) 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.

7.2 Career breaks and flexible working

The assessment of MRC funding applications frequently involves appraisal of the applicant's track record. In making this appraisal, reviewers should take into account time spent outside the active research environment, whether through career breaks or flexible working. See our [guidance for reviewers on career breaks and flexible working](#).

7.3 Ethical issues

Medical research raises a number of ethical issues and the MRC's requirements and expectations relating to research involving humans or animals, or where there are other sensitivities are outlined in the [MRC Ethics Series](#).

Many of the finer points of applications addressing the issues will involve scrutiny by an independent ethics committee, however we also need to be satisfied that the work is acceptable. Therefore, we ask all reviewers to:

- Follow good ethical practice in their role of assessing applications
- Consider carefully the ethical acceptability of research applications and where necessary highlight areas the MRC may need to consider
- Assist the MRC in identifying any wider potential implications e.g. could a piece of non-clinical research involving techniques such as synthetic biology or animal cloning have far-reaching ethical implications?

7.3.1 Investigations involving human participants, associated data and/or material

Our expectations and requirements around research involving humans are outlined in the [MRC Ethics Series](#) and [MRCs embedding diversity in research design policy](#). Specific guidance and advice is available for work involving children, individuals who lack mental capacity, participants in developing societies, personal information, human tissues and biological samples.

Although most of this work involves independent scrutiny by an independent ethics committee, we also need to be satisfied that the work is acceptable. Many applications have broad-ranging programmes, but do not include detailed protocols, so it is useful to focus on obvious problem areas and novel issues, including:

- Appropriately justify or consider diversity and inclusivity in the design of research involving human participants, data, or samples
- Clinical trials – these are submitted with detailed protocols
- Applications which may involve potentially novel risks need to take into account public as well as scientific perception
- Applications where consent cannot readily be given or is not going to be obtained
- Applications which entail using data or material in ways which the donor may not have envisaged
- Applications in areas of public concern (e.g. genetics) where the potential relevance to health may not be obvious.

If you consider that there are particular ethical considerations around a application, please raise these in your review so that they may be considered by the board or panel.

7.3.2 Investigations involving animals

We expect all applications to conform to our guidance '[Responsibility in the use of animals in bioscience research: Expectations of the major research council and charitable funding bodies.](#)'

Reviewers are asked to consider whether:

- Animals are needed for the proposed research
- The potential benefit justifies any adverse effects on the animals
- The species and model chosen are appropriate
- The experimental design and planned statistical framework chosen are suitable to address the scientific objectives
- The primary outcomes to be assessed and frequency of measurements / interventions is appropriate
- The total number of animals and chosen sample sizes is appropriate in relation to the planned statistical analyses, including the sex of the animals, cells or tissues (both sexes, unless a strong justification is given for not doing so).
- Appropriate plans to minimise experimental bias are in place

This requirement applies whether or not the animals are to be purchased with MRC funds and whether the work is to be undertaken within or outside the UK.

7.3.3 Risks of research misuse

The MRC's guidance can be found at: [Managing risks of research misuse.](#)

Reviewers are asked to consider:

- Are there any ethical, safety or security issues or other potential adverse consequences associated with the proposed research?
- Whether these issues would include any tangible risks meaning that the research could be misused for harmful purposes. Such purposes would include actions which lead to harm to humans, animals or the environment including terrorist misuse;
- If such issues exist, have these been addressed satisfactorily in the application?

7.3.4 Investigations involving institutions or external bodies

Where a application involves study at the level of institutions or communities, it is important to ensure that ethical issues and potential impact from the group or institutional perspective have been properly addressed.

Annex 1: Scoring matrix

Our scoring system allows peer reviewers to provide an overall score for an application, taking into account all the assessment criteria. The scoring matrix contains descriptions of what we expect of applications in each scoring band. These should allow the reviewers to identify a score that reflects their overall summary of the application.

Score Indicators	Score
<p>Exceptional - Top international programme, or of exceptional national strategic importance</p> <ul style="list-style-type: none"> • Scientific quality and impact <ul style="list-style-type: none"> ○ Crucial scientific question or knowledge gap or area of strategic importance ○ Original and innovative; novel methodology and design ○ Potential for high health and/or socioeconomic impact • Scientific leadership <ul style="list-style-type: none"> ○ Excellent leadership (<i>track record, team, environment, and collaborators</i>) • Justification of resources <ul style="list-style-type: none"> ○ Potential for high return on investment (<i>resources requested, likelihood of project delivery, anticipated knowledge generation</i>) ○ Appropriate staff time allocated to deliver project (<i>Principal investigators and co-investigators</i>) • Other: Ethical and/ or governance issues are fully considered 	6
<p>Excellent - Internationally competitive and leading edge nationally, or of national strategic importance</p> <ul style="list-style-type: none"> • Scientific quality and impact <ul style="list-style-type: none"> ○ Crucial scientific question or knowledge gap or area of strategic importance ○ Original and innovative; novel methodology and design ○ Potential for high health and/or socioeconomic impact • Scientific leadership <ul style="list-style-type: none"> ○ Excellent leadership (<i>track record, team, environment, and collaborators</i>) • Justification of resources <ul style="list-style-type: none"> ○ Potential for high return on investment (<i>resources requested, likelihood of project delivery, anticipated knowledge generation</i>) ○ Appropriate staff time allocated to deliver project (<i>Principal investigators and co-investigators</i>) • Other: Ethical and/ or governance issues are fully considered 	5
<p>Very High Quality - Internationally competitive in parts</p> <ul style="list-style-type: none"> • Scientific quality and impact <ul style="list-style-type: none"> ○ Crucial scientific question or knowledge gap or area of strategic importance ○ Robust methodology and design (<i>innovative in parts</i>) ○ Potential for high health and/or socioeconomic impact • Scientific leadership <ul style="list-style-type: none"> ○ Excellent leadership (<i>track record, team, environment, and collaborators</i>) • Justification of resources 	4

<ul style="list-style-type: none"> ○ Potential for significant return on investment ○ Appropriate staff time allocated to deliver project (<i>Principal investigators and co-investigators</i>) ● Other: Ethical and/ or governance issues are fully considered 	
<p>High Quality</p> <ul style="list-style-type: none"> ● Scientific quality and impact <ul style="list-style-type: none"> ○ Worthwhile scientific question or knowledge gap or a valuable scientific resource ○ Methodologically sound study ○ Potential for significant health and/or socioeconomic impact ● Scientific leadership <ul style="list-style-type: none"> ○ Strong leadership (<i>track record, team, environment, and collaborators</i>) ● Justification of resources <ul style="list-style-type: none"> ○ Potential for significant return on investment (<i>resources requested, likelihood of projected delivery, anticipated knowledge generation</i>) ○ Appropriate staff time allocated to deliver project (<i>may be scope strengthen management of the project</i>) ● Other: Ethical and/ or governance issues are well considered 	3
<p>Good Quality</p> <ul style="list-style-type: none"> ● Scientific quality and impact <ul style="list-style-type: none"> ○ Worthwhile scientific question with potentially useful outcomes ○ Methodologically sound study but areas require revision ○ Likelihood of successful delivery ● Scientific leadership <ul style="list-style-type: none"> ○ Appropriate leadership (<i>scope to strengthen team; environment; collaborators</i>) ● Justification of resources <ul style="list-style-type: none"> ○ Potentially more limited return on investment (<i>resources requested, likelihood of project delivery, and anticipated knowledge generation</i>) ○ Resources broadly appropriate to deliver the application ● Other: Ethical and/or governance issues are adequately considered 	2
<p>Poor Quality</p> <ul style="list-style-type: none"> ● Scientific quality and impact <ul style="list-style-type: none"> ○ Poorly defined question ○ Methodologically weak study ○ Limited likelihood of new knowledge generation ● Scientific potential <ul style="list-style-type: none"> ○ Poor leadership ● Justification of resources <ul style="list-style-type: none"> ○ Potentially poor return on investment ● Other: Ethical and/ or governance issues are not adequately considered 	1

Annex 2: Assessment Criteria by funding opportunity

Research Grant assessment criteria

Importance	<ul style="list-style-type: none"> • How important are the research questions, or gaps in knowledge, that would be addressed? • Is the level of innovation likely to lead to significant new understanding?
Scientific potential	<p>Research Quality</p> <ul style="list-style-type: none"> • What are the prospects for good scientific progress? • How convincing and coherent is the management strategy proposed? • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following: <ul style="list-style-type: none"> ○ Measures for avoidance of bias (eg blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used ○ Circumstances in which power calculations are not appropriate to determine sample size • How well have project risks been identified, and will they be mitigated? <p>Research environment and people</p> <ul style="list-style-type: none"> • How suitable is the investigator group? Please comment on track record(s) of the individual(s) in their fields and whether they are best-placed to deliver the proposed research. Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. • How suitable is the environment where the proposed research will take place? Please comment on the level of commitment of the host research organisation to supporting the proposed research and whether appropriate facilities will be available to the researchers. <p>Impact</p> <ul style="list-style-type: none"> • What is the potential economic and societal impact of the proposed research? Please comment on: <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life ○ identification of potential impacts of research and plans to deliver these <p>Ethics</p>

- Are there any ethical and/or research governance issues? Please comment on:
 - whether the proposed research is ethically acceptable
 - any ethical issues that need separate consideration
 - appropriateness of ethical review and research governance considerations
 - any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the application
- Have diversity and inclusion been considered in the study population? If not, is there is a clear justification?

Data management plan

- Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account:
 - the types, scale and complexity of data being (or to be) managed
 - the likely long-term value for further research including by sharing data
 - the anticipated information security and ethics requirements

MRC industry collaboration framework

Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a [MRC industry collaboration framework \(ICF\)](#).

All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.

The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:

- the appropriateness of the partnership between the collaborative partners
- whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed
- if the in-kind costs provided by the industry partner have been costed appropriately.

The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.

The panel or board may also challenge the developmental status of the project, Basic versus Applied, as set out in the ICF form and checked by LifeArc.

Research involving cohort resources

Any research application involving a cohort.

	<ul style="list-style-type: none"> • What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? • Why can this science be addressed using this cohort above other resources? • What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
Resources requested	<ul style="list-style-type: none"> • Are the funds requested essential for the work and justified by the importance and scientific potential of the research? • Is the applicants' stated time commitment to the work appropriate and sufficient? • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data

New Investigator Research Grant (NIRG) assessment criteria

Importance	<ul style="list-style-type: none"> • How important are the research questions, or gaps in knowledge, that would be addressed? • Is the level of innovation likely to lead to significant new understanding?
Scientific potential	<p>Research Quality</p> <ul style="list-style-type: none"> • What are the prospects for good scientific progress? • How convincing and coherent is the management strategy proposed? • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following: <ul style="list-style-type: none"> ○ Measures for avoidance of bias (e.g. blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used

	<ul style="list-style-type: none"> ○ Circumstances in which power calculations are not appropriate to determine sample size ● How well have project risks been identified, and will they be mitigated? <p>Research Environment and People</p> <ul style="list-style-type: none"> ● Is the applicant capable of becoming an independent Principal Investigator and is now ready to take the next step towards that goal (mrc.ukri.org/skills-careers/skills-needed-to-win-support/)? Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. ● Has the applicant demonstrated that they will direct the proposed research and be actively engaged in carrying it through, taking into account research experience, supervisory experience and publications? ● Does the individual have the potential to progress to securing further grant support (e.g. MRC research grant funding) at the end of this award? I.e. do they have clear research plans that are distinct from their current group / leader? Do they cite outputs from their research experience to date to demonstrate their readiness to develop? ● Is the host research organisation providing an appropriate career structure and support to facilitate the transition to independence? This should be detailed in a letter of support from the research organisation. ● Are the collaborators well-chosen? <p>Impact</p> <ul style="list-style-type: none"> ● What is the potential economic and societal impact of the proposed research? Please comment on: <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life ○ identification of potential impacts of research and plans to deliver these <p>Ethics</p> <ul style="list-style-type: none"> ● Are there any ethical and/or research governance issues? Please comment on: <ul style="list-style-type: none"> ○ whether the proposed research is ethically acceptable ○ any ethical issues that need separate consideration ○ appropriateness of ethical review and research governance considerations ○ any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the application ○ Have diversity and inclusion been considered in the study population? If not, is there is a clear justification? <p>Data Management Plan</p> <ul style="list-style-type: none"> ● Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account:
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	<ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research including by sharing data ○ the anticipated information security and ethics requirements <p>MRC industry collaboration framework</p> <p>Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p> <p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic verses Applied, as set out in the ICF form and checked by LifeArc.</p> <p>Research involving cohort resources</p> <p>Any research application involving a cohort.</p> <ul style="list-style-type: none"> ☒ What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? ☒ Why can this science be addressed using this cohort above other resources? ☒ What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
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Resources requested	<ul style="list-style-type: none"> • Are the funds requested essential for the work and justified by the importance and scientific potential of the research? • Is the applicant's stated time commitment to the work appropriate and sufficient? • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data
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Programme Grant assessment criteria

Importance	<ul style="list-style-type: none"> • How important are the research questions, or gaps in knowledge, that would be addressed? • Is the proposed work a "programme", i.e. a coordinated and coherent group of related projects to answer an inter-related set of questions? • Does the work require long-term and extensive support?
Scientific potential	<p>Research Quality</p> <ul style="list-style-type: none"> • What are the prospects for good scientific progress? • How convincing and coherent is the management strategy proposed? • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following: <ul style="list-style-type: none"> ○ Measures for avoidance of bias (e.g. blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used ○ Circumstances in which power calculations are not appropriate to determine sample size • How well have project risks been identified, and will they be mitigated? <p>Research Environment and People</p> <ul style="list-style-type: none"> • From the applicant's track record of research, do they have the potential to successfully manage and deliver a major research programme? • What is the track record and standing in the field of the named applicants? Reviewers should take account of preprints in

	<p>considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published.</p> <ul style="list-style-type: none"> • How appropriate is the expertise of the applicants to the proposed work? • Is the proposed environment(s) suitable and does it have the variety of expertise and disciplines to support a programme? • Has the host institution(s) demonstrated a clear commitment to the proposed programme for the duration of the grant? • Are any collaborators well chosen? • Does the environment provide appropriate opportunities for training and career development of personnel supported on the grant? • Are there any dependencies on other organisations or funding of which the MRC should be made aware? <p>Impact</p> <ul style="list-style-type: none"> • What is the potential economic and societal impact of the proposed research? Please comment on: <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life ○ identification of potential impacts of research and plans to deliver these <p>Ethics</p> <ul style="list-style-type: none"> • Are there any ethical and/or research governance issues? Please comment on: <ul style="list-style-type: none"> ○ whether the proposed research is ethically acceptable ○ any ethical issues that need separate consideration ○ appropriateness of ethical review and research governance considerations ○ any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the application • Have diversity and inclusion been considered in the study population? If not, is there a clear justification? <p>Data Management Plan</p> <ul style="list-style-type: none"> • Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account: <ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research including by sharing data ○ the anticipated information security and ethics requirements. <p>MRC industry collaboration framework Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p>
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	<p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic verses Applied, as set out in the ICF form and checked by LifeArc.</p> <p>Research involving cohort resources</p> <p>Any research application involving a cohort.</p> <ul style="list-style-type: none"> ☒ What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? ☒ Why can this science be addressed using this cohort above other resources? ☒ What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
<p>Resources requested</p>	<ul style="list-style-type: none"> • Are the funds requested essential for the work and justified by the importance and scientific potential of the research? • Is the applicants' stated time commitment to the work appropriate and sufficient? • Where the MRC is being asked to fund investigator salaries, are the requests in each case reasonable? • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p>

	<ul style="list-style-type: none"> Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data
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Partnership Grant assessment criteria

Importance	<ul style="list-style-type: none"> How important are the objectives the partnership plans to address? Have the applicants demonstrated the partnership format is right for activities they propose and for the scientific field? Will the partnership provide added value to the research? How original is the application? Are there similar partnerships in the UK or elsewhere? What impact will this Partnership grant funding have on current or future scientific delivery and on scientific strategy?
Scientific potential	<p>Research Quality</p> <ul style="list-style-type: none"> What is the potential of this approach to advance the scientific area? Are the aims and objectives realistic within the timeframe and with the resources proposed? How convincing and coherent is the management strategy proposed? What is the longer-term outlook beyond the funded period of the partnership? Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following: <ul style="list-style-type: none"> Measures for avoidance of bias (e.g. blinding, randomisation) Number of experimental and control groups and sample size per group How the sample size was calculated, showing power calculations and including justification of effect size Overview of the planned statistical analyses in relation to the primary outcomes to be assessed Frequency of measurements/interventions to be used Circumstances in which power calculations are not appropriate to determine sample size How well have project risks been identified, and will they be mitigated? <p>Research Environment and People</p> <ul style="list-style-type: none"> How will the researchers involved in the partnership deliver the proposed work? Specifically: <ul style="list-style-type: none"> Are the co-investigators and/or collaborators well chosen? Does the quality and productivity of their recent work suggest that they will be likely to successfully deliver the proposed objectives? Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. What skills and expertise do the Investigators have to promise success in the proposed approaches?

- Has the partnership environment been well described?
- Has the host RO(s) demonstrated commitment to supporting the proposed partnership, for example by reducing or waiving co-investigator salary and associated estates costs?
- If the application is for shared equipment or expertise, have the applicants described where this will be sited and how it will be supported by the host RO(s)? Does the management strategy ensure equitable access to any equipment or staff that will be shared between collaborators?
- Does the partnership provide opportunities for the training and career development of personnel working in the partnership?
- If the application involves a request for studentships:
 - Will the studentships provide a unique training experience which could not be supported by existing MRC studentship support for example Doctoral Training Grant funding?
 - Will the management strategy ensure high standards of supervision, mentoring and support for students?
 - Do all studentships requested meet MRC's research training objectives and expectations (see RCUK Statement of Expectations for Doctoral Training)?

Impact

- What is the potential economic and societal impact of the proposed research? Please comment on
 - identification of realistic potential improvements to human or population health
 - contribution to relieving disease/disability burden and/or improving quality of life
 - identification of potential impacts of research and plans to deliver these

Ethics

- Are there any ethical and/or research governance issues? Please comment on:
 - whether the proposed research is ethically acceptable
 - any ethical issues that need separate consideration
 - appropriateness of ethical review and research governance considerations
 - any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the application.
- Have diversity and inclusion been considered in the study population? If not, is there a clear justification?

Data Management Plan

- Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account:
 - the types, scale and complexity of data being (or to be) managed
 - the likely long-term value for further research including by sharing data
 - the anticipated information security and ethics requirements.

Research involving cohort resources

	<p>Any research application involving a cohort:</p> <ul style="list-style-type: none"> • What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? • Why can this science be addressed using this cohort above other resources? • What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
Resources requested	<ul style="list-style-type: none"> • Where the MRC is being asked to fund investigator salaries are the requests in each case reasonable and do they reflect the level of intellectual contribution? • Do contributions from the host RO(s) or from other sources enhance the value for money of the application? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data

Developmental Pathways Funding Scheme (DPFS) assessment criteria

Importance	<p>Need and solution</p> <ul style="list-style-type: none"> • Does the identified need exist? • If the need is not significant now, will it become so in the future? • Is the need met or unmet? If unmet, will it likely be unmet at the time that the proposed solution is in place? • Would meeting this need significantly reduce disease burden and/or provide a valuable commercial opportunity and/or alleviate an important development bottleneck? • Is the proposed solution reasonable? • Could the proposed solution or components thereof meet other significant needs? <p>Competitiveness</p> <ul style="list-style-type: none"> • Has the applicant identified the key competing solutions and their status or are you aware of other similar or complementary research underway elsewhere? • Has the applicant identified the key competitive advantages of their proposed solution? • How likely is it that the proposed solution, if achieved, would be widely adopted?
Scientific potential	<p>Rationale</p> <ul style="list-style-type: none"> • Is there a good medical/scientific rationale for the project? • Is there a reasonable body of evidence to support the proposed rationale?

Objective and approach

- Is the application non-duplicative of R&D efforts taking place in industry?
- Is the proposed approach an effective way of meeting the plan's objectives and is it based on a good scientific rationale?
- How innovative is the plan, or is it a tried and tested approach?
- Use of laboratory animals - where appropriate:
 - Could the proposed research work be carried out using approaches or techniques that avoid the use of animals?
 - Have the applicants fully justified the use of animals and the proposed species?
 - Is the number of animals appropriate?
 - Where the proposed research involves the use of primates – does the establishment comply with the NC3Rs' 'Guidelines on primate accommodation, care and use' 2007?
- If relevant, is the project appropriately statistically powered?
- Are the proposed plans for disseminating the results of the research appropriate and adequate?

Project plan

- Is the project plan sufficient in comparison to the complexity of the project?
- Does the plan propose reasonable go/no-go milestones? Are the milestone timings appropriate and are the success criteria necessary and sufficient to judge progression?
- Are the proposed probabilities of milestones being met reasonable?
- Collaboration/outsourcing - where appropriate:
 - Do the contributions made by the collaborating/parties contracted to undertake the outsourced work enable the project to be delivered or enable it to be delivered to the required quality or within the required time?
 - Would the proposed work be undertaken or undertaken to the required quality or within the required time in the absence of the requested funding?
 - Are potential conflicts of interest between the parties acceptable and are they being appropriately managed?

Project and risk management

- Do the applicants have, or likely will have, the necessary project management experience to deliver the plan?
- Has the individual or group established a high-quality track record in the field?
- Where the application embarks on work in a field new to the applicants, or is a first funding application, is there a firm foundation to take the work forward?
- How well does the work fit with other relevant research pursued by the applicants?
- Have the applicants identified the key project risks and reasonably judged their likelihood of occurrence and severity of impact?
- Is the proposed risk management approach appropriate?

	<p>Data Management Plan</p> <ul style="list-style-type: none"> ☒ Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account: <ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research including by sharing data ○ the anticipated information security and ethics requirements <p>Impact</p> <ul style="list-style-type: none"> ☒ What is the potential economic and societal impact of the proposed research, including: <ul style="list-style-type: none"> ○ Identification of realistic potential improvements to human or population health ○ Contribution to relieving disease/disability burden and/or improving quality of life ○ Identification of potential impacts of research and plans to deliver these <p>MRC industry collaboration framework Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p> <p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic verses Applied, as set out in the ICF form and checked by LifeArc.</p>
Resources requested	Resource requirements and environment

	<ul style="list-style-type: none"> • Has the team identified and secured reasonable access to necessary resources/skills? • For Principal Investigators and Project Managers, is the requested time consistent with their proposed involvement; necessary or sufficient for the successful management of the research; and a realistic expectation of the time they could make available? • Are the number and skills/experience of requested staff appropriate for the work described? • Is the budget realistic for the scale and complexity of the project? • Are project costs that will be met by sources other than the MRC clearly identified? • Have the applicants set out a clear and reasonable case for the requested levels of staffing and overall resources? • Has the host Research Organisation demonstrated a commitment to supporting the work? • Does the project make good use of available clinical infrastructure (BRC/Us, CRFs, patient cohorts) where appropriate? • Does the application make appropriate use of available core DPFS portfolio resources? • Taking into account the expected benefits of the work proposed and the level of resources requested, does the application promise good value for money?
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Pre-doctoral Fellowship assessment criteria

E.g. Clinical Research Training Fellowship (CRTF)

Importance	<ul style="list-style-type: none"> • Comment on the importance of the research, including: <ul style="list-style-type: none"> ○ Strength of medical or scientific case ○ Level of innovation and whether this is likely to lead to significant new understanding
Scientific potential	<p>Applicant</p> <ul style="list-style-type: none"> • Comment on the applicant, considering their: <ul style="list-style-type: none"> ○ Track record and achievements to date. Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. ○ Expertise and skill set ○ Current research standing ○ Ability to carry out the proposed work; does the applicant have adequate research experience to undertake this work? ○ Potential for the future; is the applicant committed to a career in academic medicine? • Is the applicant at the appropriate level for this fellowship? • Do you think the applicant has played a significant role in the design of the project and the writing of the research application? <p>Project and Training</p> <ul style="list-style-type: none"> • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following:

	<ul style="list-style-type: none"> ○ Measures for avoidance of bias (e.g. blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used ○ Circumstances in which power calculations are not appropriate to determine sample size <ul style="list-style-type: none"> ● Comment on the value of the proposed training plans including the proposed placements or collaborations <p>Environment</p> <ul style="list-style-type: none"> ● Comment on the suitability of the research centre where the proposed Fellowship is to be based, including: <ul style="list-style-type: none"> ○ Scientific impact in the field ○ Appropriateness for the work proposed ○ Level of commitment from supervisors, mentors and host institution ○ Opportunities for training and career development actively identified and supported <p>Ethics</p> <ul style="list-style-type: none"> ● Is the proposed research ethically acceptable? ● Are there any ethical issues that need separate consideration? ● Are the ethical review and research governance arrangements appropriate? ● Are there any potential adverse consequences for humans, animals or the environment and are these risks addressed satisfactorily in the application? ● Have diversity and inclusion been considered in the study population? If not, is there a clear justification? <p>Data Management Plan</p> <ul style="list-style-type: none"> ● Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking into account: <ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research, including by sharing data ○ the anticipated information security and ethics requirements? <p>Impact</p> <ul style="list-style-type: none"> ● What is the potential economic and societal impact of the proposed research? Please comment on: <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life
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	<ul style="list-style-type: none"> ○ identification of potential impacts of research and plans to deliver these <p>MRC industry collaboration framework Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p> <p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic verses Applied, as set out in the ICF form and checked by LifeArc.</p> <p>Research involving cohort resources Any research application involving a cohort.</p> <ul style="list-style-type: none"> ☒ What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? ☒ Why can this science be addressed using this cohort above other resources? ☒ What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
Resources requested	<ul style="list-style-type: none"> • Are the funds requested essential and justified by the importance and scientific potential of the research? Pre-doctoral applicants are not eligible for FEC. The Research Training Support Grant (up to £20,000 per annum) should be fully justified by the applicant.

	<ul style="list-style-type: none"> • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data
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Post-doctoral Fellowship assessment criteria

E.g. Skills Development Fellowship, Career Development Award (CDA), Clinician Scientist Fellowship (CSF), Senior Non-Clinical Fellowship (SNCF), Senior Clinical Fellowship (SCF)

Importance	<ul style="list-style-type: none"> • Comment on the importance of the research, including: <ul style="list-style-type: none"> ○ Strength of medical or scientific case ○ Timeliness of the applications; is it important to pursue this topic now? For example: does the application capitalise on a new advance, offering the UK the possibility of an international lead; does it relate to a new or developing healthcare need; does it exploit a “window of opportunity”, e.g. for the introduction of a new clinical development into practice? ○ Level of innovation and whether this is likely to lead to significant new understanding • Is the application “high risk, high pay-off”? If so, how? • Is the application internationally competitive?
Scientific potential	<p>Applicant</p> <ul style="list-style-type: none"> • Comment on the applicant, considering their: <ul style="list-style-type: none"> ○ Track record and achievements to date. Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. ○ Expertise and skill set; how appropriate is the expertise of the applicant to the proposed area of research? ○ Current research standing ○ Ability to carry out the proposed work ○ Potential for the future; does the applicant have the potential to progress to securing major MRC support or similar support from other funders either during or by the end of the fellowship? • Is the applicant at the appropriate level for this fellowship? <p>Project and Training</p> <ul style="list-style-type: none"> • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following:

	<ul style="list-style-type: none"> ○ Measures for avoidance of bias (e.g. blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used ○ Circumstances in which power calculations are not appropriate to determine sample size <ul style="list-style-type: none"> ● Comment on the value of the proposed training plans including the proposed placements or collaborations ● Has the work already been done or is it being done elsewhere? How persuasive is the case that earlier work needs to be replicated or extended to another system? ● Is the fellowship applied for, the most appropriate form of support in this case? <p>Environment</p> <ul style="list-style-type: none"> ● Comment on the suitability of the research centre where the proposed Fellowship is to be based, including: <ul style="list-style-type: none"> ○ Scientific impact in the field ○ Appropriateness for the work proposed ○ Level of commitment from supervisors, mentors and host institution ○ Opportunities for training and career development actively identified and supported <p>Ethics</p> <ul style="list-style-type: none"> ● Is the proposed research ethically acceptable? ● Are there any ethical issues that need separate consideration? ● Are the ethical review and research governance arrangements appropriate? ● Are there any potential adverse consequences for humans, animals or the environment and are these risks addressed satisfactorily in the application? ● Have diversity and inclusion been considered in the study population? If not, is there a clear justification? <p>Data Management Plan</p> <ul style="list-style-type: none"> ● Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking into account: <ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research, including by sharing data ○ the anticipated information security and ethics requirements? <p>Impact</p>
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	<p>☒ What is the potential economic and societal impact of the proposed research? Please comment on:</p> <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life ○ identification of potential impacts of research and plans to deliver these <p>MRC industry collaboration framework Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p> <p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic versus Applied, as set out in the ICF form and checked by LifeArc.</p> <p>Research involving cohort resources Any research application involving a cohort.</p> <ul style="list-style-type: none"> ☒ What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? ☒ Why can this science be addressed using this cohort above other resources? ☒ What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website. ● What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
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Resources requested	<ul style="list-style-type: none"> • Are the funds requested essential and justified by the importance and scientific potential of the research? • If staff costs are requested, is the time estimated for each requested staff member consistent with their involvement with the project? Is the involvement of the requested staff necessary or sufficient for the successful prosecution and management of the research? • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data
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Clinical Academic Research Partnership assessment criteria

Importance	<ul style="list-style-type: none"> • How important are the research questions, or gaps in knowledge, that would be addressed? • Is the level of innovation likely to lead to significant new understanding?
Scientific potential	<p>Research Quality</p> <ul style="list-style-type: none"> • What are the prospects for good scientific progress? • How convincing and coherent is the management strategy proposed? • Robust methodology and experimental design should be at the centre of any application to aid reproducibility of research findings. Has the applicant clearly set out and justified the following: <ul style="list-style-type: none"> ○ Measures for avoidance of bias (e.g. blinding, randomisation) ○ Number of experimental and control groups and sample size per group ○ How the sample size was calculated, showing power calculations and including justification of effect size ○ Overview of the planned statistical analyses in relation to the primary outcomes to be assessed ○ Frequency of measurements/interventions to be used ○ Circumstances in which power calculations are not appropriate to determine sample size • How well have project risks been identified, and will they be mitigated? <p>Research environment and people</p> <ul style="list-style-type: none"> • Does the applicant (Principal Investigator) meet the opportunities aims? <ul style="list-style-type: none"> ○ Are they a healthcare professional working at consultant-level or equivalent (e.g. an individual working at a senior level, holding specialized knowledge with demonstratable capacity for professional independence/leadership)?

	<ul style="list-style-type: none"> ○ Are they research-trained but not currently undertaking substantive research activity? The applicant should hold a PhD, or MD or have equivalent experience (e.g. ~3 years consolidated research time, where they have been the intellectual drive behind a project and obtained strong outputs from their research experience). The applicant should have no or limited research funding, it is expected that most applicants will have less than one PA of research time in their current job plan (0.5 days per week). ○ Is the added-value of the award articulated? E.g. will it enable the applicant to re-engage with research, put them on a research trajectory they were not currently on, support them in working in new environments or with new research partners? ● Is there evidence of the research capabilities of the applicant (Principal Investigator), as demonstrated by the productivity of and skills gained during their PhD or MD, and any other past research experience if applicable? Reviewers should take account of preprints in considering applications, noting the content of the papers, not where they, or subsequent peer reviewed papers, are published. ● How suitable is the research partner(s) (Co-Investigator)? Please comment on track record(s) of the individual(s) in their fields and whether they are best placed to support the delivery of the proposed research. Are the research interests of the applicant and research partner aligned? ● How suitable is the environment where the proposed research will take place? Please comment on the level of commitment of the host research organisation and the applicant's employer (NHS Trust or equivalent) to supporting the proposed research and whether appropriate facilities will be available to the researchers. <p>Impact</p> <ul style="list-style-type: none"> ● What is the potential economic and societal impact of the proposed research? Please comment on: <ul style="list-style-type: none"> ○ identification of realistic potential improvements to human or population health ○ contribution to relieving disease/disability burden and/or improving quality of life ○ identification of potential impacts of research and plans to deliver these <p>Ethics</p> <ul style="list-style-type: none"> ● Are there any ethical and/or research governance issues? Please comment on: <ul style="list-style-type: none"> ○ whether the proposed research is ethically acceptable ○ any ethical issues that need separate consideration ○ appropriateness of ethical review and research governance considerations ○ any potential adverse consequences for humans, animals or the environment and whether these risks have been addressed satisfactorily in the application ● Have diversity and inclusion been considered in the study population? If not, is there a clear justification?
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	<p>Data management plan</p> <ul style="list-style-type: none"> ☒ Does the data management plan indicate whether the applicants have (or are likely to have) a sound plan for managing the research data funded through the award, taking account: <ul style="list-style-type: none"> ○ the types, scale and complexity of data being (or to be) managed ○ the likely long-term value for further research including by sharing data ○ the anticipated information security and ethics requirements <p>MRC industry collaboration framework</p> <p>Any research application involving a collaboration with one or more industrial partners (contributing either in cash or in kind) is handled by MRC as a MRC industry collaboration framework (ICF).</p> <p>All ICF applications will be identifiable to reviewers as they will have 'ICF' at the start of the project title and will have a completed ICF form and ICF company partner letter of support.</p> <p>The board or panel will make a decision on whether or not to support a proposal submitted via the ICF based on:</p> <ul style="list-style-type: none"> ☒ the appropriateness of the partnership between the collaborative partners ☒ whether that in the absence of the requested funding and the collaboration the planned research could not be undertaken, or that it could not be undertaken to the quality level or timescale proposed ☒ if the in-kind costs provided by the industry partner have been costed appropriately. <p>The panel or board will also be asked to raise any concerns about any potential conflicts of interest that have not been addressed and if there are concerns with the intellectual property sharing arrangements that have not been addressed by MRC and LifeArc.</p> <p>The panel or board may also challenge the developmental status of the project, Basic versus Applied, as set out in the ICF form and checked by LifeArc.</p> <p>Research involving cohort resources</p> <p>Any research application involving a cohort.</p> <ul style="list-style-type: none"> ☒ What new health research questions or hypotheses it will be possible to answer over the next five to ten years using the cohort resource? ☒ Why can this science be addressed using this cohort above other resources? ☒ What does this cohort offer that other cohorts do not (nationally and internationally) and how does it relate to other relevant cohorts? Applicants should either list the assets (measures, specimens, population group) as an Annex or reference the cohort website.
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	<ul style="list-style-type: none"> • What are the plans for establishing the cohort as a resource – how is it/will it be used by the wider research community?
Resources requested	<ul style="list-style-type: none"> • Are the funds requested essential for the work and justified by the importance and scientific potential of the research? • Is the applicants' stated time commitment to the work appropriate and sufficient? Applicants can request between 20 - 50 % of their salary for 1 - 3 years. • Does the application demonstrate value for money in terms of the resources requested? • Is any animal use fully justified in terms of need, species, number, conformance to guidelines? <p>Research involving cohort resources</p> <ul style="list-style-type: none"> • Applicants must be clear which costs relate to de novo data collection, analysis of new data and/or maintenance or use of existing data