BHF independent expert review guidelines

Independent expert review is the foundation of how funding decisions are made at the BHF. Whilst the BHF supports a wide range of funding schemes, the basic principles of good expert review remain constant. This means that although each BHF funding scheme may have its own specific criteria (see respective review forms), the following guidelines should be applied in the assessment of all funding applications to the BHF.

These guidelines are designed to assist BHF committee members and external expert reviewers maintain the high standards of independent expert review expected and to help applicants understand how their proposals are assessed. Additionally, BHF has made a commitment to support and uphold the principles set out by the San Francisco Declaration on Research Assessment (DORA), which are reflected in the guidelines.

Please note that reviews are, at least in part, anonymously fed back to the applicant(s) and considered by Committee members who are not necessarily specialists within the field. Therefore, the language used should be clear and jargon-free.

Equality, diversity, inclusion and avoiding bias

The BHF is committed to actively and openly supporting and promoting Equality, Diversity and Inclusion (EDI) in research. BHF committee members and independent expert reviewers are required to ensure that their assessments and decision-making are fair. We recommend that all BHF committee members and independent expert reviewers read the Royal Society's briefing <u>Understanding unconscious bias</u>. Briefly, BHF committee members and external expert reviewers should:

- make evaluations and decisions based on objective assessment and evidence
- think carefully and deliberately about decisions there is some evidence that slowing down decision-making can mitigate unconscious bias
- consider the reasons for decisions
- think about potential personal bias
- be aware of and account for cultural stereotypes or perceptions

In addition, BHF committee members are asked to:

- engage in discussions of all applications Research has shown that
 inclusive decision-making by groups results in more positive
 outcomes, by pooling information, exploring issues more fully and
 overcoming hidden biases in individuals. We ask that committee
 members try and contribute where they can to the discussion and be
 mindful of the limitations that can arise when making a decision
 based on the views of a small subset of the group.
- act as a critical friend by monitoring each other for any signs of unconscious bias or assumptions (e.g. stereotyping) – in general, people are far more able to see bias in others than in themselves, so our committee members should be prepared to speak up if they see examples of bias in the discussions of committee colleagues.
- be prepared to challenge the consensus or other confidently expressed opinions, and to offer alternative views to avoid authority bias or group think

	 declare at the meeting if the assessment of the applicant is influenced by any personal knowledge of the applicant(s) (above what's in the application or is publicly available).
Transparency	BHF committee members and external expert reviewers should be explicit in their written reviews about the criteria that they have applied and the concerns that have arisen in their evaluations. It is particularly important that concerns that are reflected in given scores are clearly articulated in the non-confidential comments.
Conflicts of interest	BHF committee members and external expert reviewers should be impartial and assess applications based on their merits. Potential conflicts of interest that could threaten reviewer impartiality should be declared to the BHF research team who will advise further. Ongoing collaborations or related commercial interests are examples of conflicts of interest.
Consideration of all research outputs	BHF committee members and external expert reviewers are advised to consider the value and impact of all research outputs (including - but not limited to – publications, datasets, influence in policy, inventions, preprints, software, contribution to clinical guidelines, and protected IP). Qualitative indicators of research impact, such as influence on policy and practice, should also be considered.
Appropriate use of metrics	Applicants are requested not to mention journal impact factors in their applications. Where publications are listed in applications, BHF committee members and external expert reviewers are instructed not to use journal-based metrics to assess a researcher's career history or to make funding decisions. Published research achievements should be judged on their own merits rather than on the basis of the journal in which they have been published.
Use of animals in research	Applications should include an appropriately detailed and justified experimental plan, with statistical analyses and preliminary data to support the proposed research. This includes incorporation of the principles of the 3RS (Replacement, Reduction and Refinement) where animals are to be involved. In particular, BHF committee members and external expert reviewers are asked to consider and comment on whether: - the research question can be addressed without the use of animals - the species is justified - the experimental design is appropriate - the number of animals requested and the power calculations are appropriate BHF recommends applicants use the NC3R's Experimental Design Assistant when designing their animal research experiments. Please refer to the NC3Rs ARRIVE guidelines and Responsibility in the use of animals in bioscience research for further guidance.
Open research	Open research includes open access to research publications and access to the underlying research data ('open data'). The BHF does not mandate open data but does expect publications arising from research it has funded to be open access (see BHF Open Access policy).
Inclusive research design	The BHF's Equality Diversity and Inclusion Strategy includes an ambition that by 2025, our research community will be actively considering strategies to improve the representativeness of their research. For most grant types, applicants are now asked to provide information on whether and how they have considered how factors such as age, sex, gender or ethnicity could be relevant to the design of their research project and provide information on

male/female representation in their proposed study. BHF committee members and external reviewers are asked to take this information into account when assessing the design and research methods of a proposal. Covid-19 impact BHF recognises the substantial impact that the Covid-19 pandemic has had statement on the research community and has included an optional Covid-19 impact (optional) statement within all application forms. If a statement has been provided, please note that it should be treated as being for information purposes only and should not be commented upon as part of the formal review or in the confidential comments. The information provided should only be used to make appropriate adjustments when assessing an individual's track record and any altered productivity arising from the Covid-19 pandemic, and should not negatively impact assessment. Additional guidance can also be found within the review forms. Use of AI tools in Committee members and external reviewers must not use generative Al peer review when assessing grant applications. Maintaining security and confidentiality in our review process is essential for safeguarding the exchange of scientific opinions and evaluations and the release of material into generative AI tools breaches this confidentiality. Furthermore, the use of AI tools may compromise the integrity of our peer review process by, for example, producing text that contains inappropriate content, such as generic comments and restatements of the application

As a member of the Association of Medical Research Charities (AMRC), the BHF upholds the <u>AMRC's</u> principles of expert review. These include:

- Proportionality our review processes are tailored to individual funding schemes and initiatives; see individual <u>funding scheme</u> webpages for information on how funding decisions are made across our funding schemes.
- Independence BHF funding committee members and external expert reviewers are independent of BHF's administrative staff and trustees. We have an open <u>Expression of</u> <u>Interest call</u> for prospective independent expert reviewers and funding committee members.
- Diversity BHF funding committee members have a diverse range of scientific expertise, across scientific disciplines, cardiovascular conditions and the discovery/ translational/clinical spectrum. Our Clinical studies Committee also has representation from an <u>independent Patient Advisory Group</u>. For information related to the age, disability status, ethnicity and gender our funding committee members, see <u>Our research funding diversity data report</u>.
- **Rotation** BHF funding committee members serve for a maximum of three to four years before stepping down.
- Impartiality BHF funding committee members are subject to the BHF's conflict of interest policy and are required to complete an annual Declaration of Interest form.
- Transparency details of the <u>five main BHF funding committees</u> and information on how we make funding decisions across individual <u>funding schemes</u> are available online.