National Centre
for the Replacement
Refinement & Reduction
of Animals in Research

Training Fellowship Assessment Panel: Scoring criteria

This document is intended as a guide for Panel members to score applications. It is essential that Panel members consider a range of factors when deciding on the overall score for a proposal.

1. Science and 3Rs potential

Panel members should consider both the excellence of the science and the likely 3Rs impact should the proposed research be successful. In order to help Panel members determine a combined score for the scientific and 3Rs potential of an application, the NC3Rs uses the scoring system shown below.

2. Overall score

Panel members are asked to score the application from a range of 1 – 10, where one is the lowest score and ten is the highest. Scores should be whole numbers (0.5 integers are not accepted). Proposals with an average score of between seven and ten are considered fundable.

The scoring system should be used to determine the overall science and 3Rs score to give an application. Panel members should refer to Annex 1 for guidance when determining descriptors. The science and 3Rs descriptors should be used to form the basis of the overall score but Panel members should also judge whether the additional considerations listed below increase or lower the score.

	POTENTIAL 3Rs IMPACT				
SCIENCE	Exceptional	Excellent	Very Good	Good	Not competitive
Exceptional	10	9	8	7	5
Excellent	9	8	7	6	4
Very Good	8	7	6	5	3
Good	7	6	5	4	2
Not competitive	5	4	3	2	1

When assessing Training Fellowship applications Panel members should also consider the topics listed below:

2. Applicant and research environment

Panel members should consider the suitability and track record of the applicant and the appropriateness of the sponsors, mentors and research environment.

2.1. The applicant

- Area of expertise and ability to carry out the proposed work
- Research excellence, as demonstrated by evidence of outputs from previous research projects e.g. publications, conference presentations and awards
- Scientific independence, as demonstrated by independent research ideas and a clear understanding of the contribution of their research to their field
- Ambition and potential, as demonstrated by plans to access skills training (e.g. in another research centre or industry) and career development support that will underpin their future career
- Passion for and commitment to the NC3Rs mission, and enthusiasm for assuming an ambassadorial role for the 3Rs

2.2 Sponsors and research environment

- Standing of the proposed sponsor(s) in the field, their area of expertise, and their suitability to providing scientific guidance on the proposed project
- Standing of the proposed Research Organisation in the field
- Appropriateness of the research environment for the proposed project, and for the autonomous development of the applicant independent of their group leader/supervisor
- Commitment of the organisation and Head of Department to the applicant and the proposed research programme
- Area of expertise and suitability of collaborators listed, and the value they add to the project and the development of the applicant

2.3 Additional points for consideration

In addition to the above, Panel members should also consider whether there are any other issues that could influence the overall score.

These include issues such as:

- Ethics and research governance (e.g. whether the work is ethically acceptable and if the ethical review and research governance arrangements are clear and acceptable)
- If animal research is proposed, whether due consideration has been given to the 3Rs (e.g. whether the species and numbers of animals to be used are adequately justified and the husbandry and care of the animals is appropriate)

Annex 1 Guidance on scoring criteria

The following table should be used as guidance when determining the appropriate science and 3Rs descriptors. It is not necessary to meet all of the individual criteria as this is not intended to be prescriptive but rather to provide a general framework.

Science	3Rs
Exceptional ▪ Highly original and innovative ▪ Novel methodology and design ▪ Crucial scientific question or knowledge gap or area of strategic importance to the UK/internationally ▪ Additional potential for high health and/or socioeconomic impact ▪ Potential for high return on investment ▪ Very high likelihood of successful delivery (risks well managed)	**Exceptional** Potential to have a very high impact on the 3Rs e.g.: ▪ Replacing/reducing a large number of animals ▪ Refining a severe procedure (even if numbers ▪ affected are low) ▪ Applicable to other models or disciplines ▪ Will have a local impact on animal use with a very high likelihood of adoption by other groups nationally/internationally* ▪ Strategically important area as identified by the NC3Rs
Excellent ▪ Original and innovative ▪ Robust methodology and design (innovative in parts) ▪ Key scientific question or knowledge gap or area of strategic importance to the UK/internationally ▪ Additional potential for significant health and/or socioeconomic impact ▪ Valuable scientific resource ▪ Potential for significant return on investment ▪ High likelihood of successful delivery	**Excellent** Potential to have a high impact on the 3Rs e.g.: ▪ Replacing/reducing a significant number of animals ▪ Refining a severe/moderate procedure (even if numbers affected are low) ▪ Could be applicable to other models or disciplines ▪ Will have a local impact on animal use with a high likelihood of adoption by other groups nationally/internationally* ▪ Strategically important area as identified by the NC3Rs
Very Good ▪ Robust methodology and design ▪ Worthwhile scientific question and/or addresses a strategically important knowledge gap ▪ High likelihood of contributing to new knowledge generation ▪ Resources appropriate to deliver the proposal ▪ High likelihood of successful delivery	**Very Good** Potential to have a medium impact on the 3Rs e.g.: ▪ Replacing/reducing a significant number of animals ▪ Refining a moderate procedure (even if numbers affected are low) OR refining a mild procedure where numbers are high ▪ Could be applicable to other models or disciplines ▪ Will have a local impact on animal use with the likelihood of adoption by other groups nationally/internationally ▪ Addresses an important concern as identified by the NC3Rs
Good ▪ Methodologically sound study ▪ Worthwhile scientific question with potentially useful outcomes ▪ Resources broadly appropriate to deliver the proposal ▪ Moderate likelihood of contributing to new knowledge generation ▪ Good likelihood of successful delivery	**Good** Potential to have a medium to low impact on the 3Rs e.g.: ▪ Replacing/reducing a modest number of animals ▪ Refining a mild/unclassified procedure ▪ Not directly applicable to other models or disciplines ▪ Will have a local impact on animal use but unlikely to be adopted more widely ▪ Addresses a 3Rs concern
Not competitive ▪ Methodologically weak study ▪ Poor quality science (may also include ethical concerns) ▪ Question poorly defined ▪ Unlikely to contribute to new knowledge generation ▪ Resources inappropriate to deliver the proposal	**Not competitive** Will have no (or a very low) impact on the 3Rs e.g.: ▪ Will not replace/reduce any animal use ▪ Does not refine a classified procedure ▪ Not applicable to other models or disciplines ▪ Will not have a local impact on animal use or be adopted by more widely ▪ Does not address a 3Rs concern

*Local impact refers to: within an applicant's own laboratory and/or institution