

NC3Rs International 3Rs Prize - Guidance

The NC3Rs International 3Rs Prize, sponsored by GSK, is awarded to highlight publications with exceptional contribution to scientific and technological advances in the 3Rs in medical, biological or veterinary sciences. The Prize aims to recognise the contributions and achievements of individuals behind the research and enable the further development of the individual and the 3Rs method highlighted in the publication.

What is the 3Rs Prize?

This prestigious award consists of a £28k prize grant* and a £2k personal award.

Where a publication is highly commended by the Panel, a £4k prize grant and £1k personal award may also be awarded.

*£20k is provided by GSK with the remaining funds provided by the NC3Rs.

In previous years, the prize grant has been used to:

- Update a 3Rs in silico modelling software to increase usability and extend its use within industry
- Optimise a 3Rs method to test novel vaccine candidates to provide data for grant applications
- Fund personal salary enabling the researcher to further establish themselves in a 3Rs field
- Purchase new equipment to increase the experimental capabilities of a 3Rs in vitro method
- A follow up in-depth characterisation study to further validate a 3Rs in vitro method

What types of papers are eligible?

The primary research must have been published in a peer-reviewed journal between 1 September 2020 and 1 September 2023. Papers that are in press by 1 September 2023 will also be considered. Primary research includes any experimental or laboratory-based research. Review articles (including systematic reviews and meta-analyses) are not eligible.

Eligible papers include those where the main purpose of the research was to achieve a 3Rs impact as well those where the 3Rs impacts were a secondary benefit.

Who is eligible?

The Prize is awarded to an individual who may be the Principal Investigator, research lead or any other author. Any researcher in academia or industry, in the UK or overseas is eligible.

Where there are multiple named individuals who substantially contributed to a manuscript (e.g. joint first authors), the Prize can be awarded collectively. This should be made apparent in the application form.

How to apply?

The completed application form and a copy of the manuscript should be submitted as PDF files by email to 3rsprize@nc3rs.org.uk by 1 May 2024.

Assessment criteria

The following criteria will be taken into consideration by the 3Rs Prize Selection Panel when assessing applications:

- The actual and/or potential impact on the 3Rs
- Importance of the research question
- Transparency and robustness of the study design
- How well the impacts (3Rs and scientific) have been disseminated to date
- Strength of plans for the Prize grant
- Potential impacts for the research, 3Rs and development of the individual

Considerations for completing the application form

Section 2

The 3Rs Prize is awarded to an individual but the NC3Rs recognises science is rarely an individual effort. Please use this section to highlight others involved in the manuscript and research, including any technicians, PhD students, postdoctoral researchers etc.

Section 3

This section should be completed where the study involves live animals, from mammals to fish, and includes the use of invertebrates.

All papers reporting the use of animals must complete the <u>ARRIVE Essential 10</u>. This is to ensure the data from animal experiments can be fully evaluated, to maximise the information published and minimise unnecessary studies. The ARRIVE website contains further details and detailed explanations for each item of the guidelines.

If any details are missing from the manuscript, this should be justified to the Panel. Please note this should be a justification for why the item has not been reported rather than why it was not performed in the study. For example, if no statistical analyses were performed then this item would not be applicable to the study carried out and reporting would not be expected.

Section 4 and 5

Where possible, it is important to provide measures of impact. For scientific impacts, demonstrate how the method or technique improves upon the gold-standard in the field and the scientific advantages. For example, an *in vitro* replacement technique may give a better understanding of molecular mechanisms.

The 3Rs impacts of the research should be clearly articulated. It is important not to provide sweeping generalisations such as "this project will reduce the use of millions of animals in toxicology" or "this model could replace up to 20% of patient-derived xenograft mice in cancer studies".

Instead:

For replacement: describe the types of animal models and studies that could be replaced and the numbers of animals that are currently used for this purpose. What proportion of this use was/could be replaced, and how have you arrived at this estimate?

For reduction: describe the current group sizes or number of animals that are used in a study and what this was/could be reduced to using the method in the nominated paper.

For refinement: describe the nature and level of suffering the animals experience, including the number of animals that experience this suffering, and how this is/would be minimised using the method in the nominated paper.

<u>Further guidance on how to write effectively about the 3Rs impacts of research</u>, along with supporting metrics, can be found on our website.

Section 6

The prize grant is intended for use for furthering the 3Rs impact of the research. This may be by enabling further dissemination, purchasing new equipment, providing training opportunities, secondment to industry etc.