Use of Animals - Guidance for EPSRC Applicants and Peer Reviewers

This guidance should be read in conjunction with EPSRC's policy on the use of animals in research (http://www.epsrc.ac.uk/about/standards/animalresearchpolicy/).

Guidance for Applicants

Researchers are strongly advised to read the following section carefully before preparing a proposal to ensure all the information required is included in the appropriate sections of their application.

This information must be provided for all proposals involving animals, regardless of whether or not the animal costs are requested as part of the proposal. Applicants should note that the sections below will be subject to equally careful scrutiny, and will carry substantial weight when assessing the scientific strength of the proposal.

The table below summaries the key information a proposal should include. Where a proposal involves multiple experiments this level of detail should be included for each type of experiment.

Location	Information	Details
Animal Research section of the Je-S form	Procedure Severity	Confirmation of the use of animals (this should be ticked as yes even if the animal costs are not requested as part of the proposal) and details of any procedures categorised as moderate or severe.
Animal Species section of the Je-S form under 'Supporting Information' for each species	The need to use animals and the choice of species	A sound scientific reason for the use of animals and an explanation why there are no realistic non-animal alternatives An explanation of how the choice of species complies with the Animals (Scientific Procedures) Act 1986 (ASPA).

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¹ For example; pilot study, tissue supply, treatment comparison.

Location	Information	Details
	Experimental approach	The number of experimental and control groups, the total number of animals used in each experiment and the number of animals in each experimental group, and the number of times each animal will be measured; the number of independent replications of each experiment indicated; any steps taken to minimise the effects of bias when allocating animals to treatment (e.g. randomisation procedure) and when assessing results (e.g. blinding).
	Sample size	An explanation of how the number of animals was arrived at, including power calculations if appropriate or other supporting information to demonstrate that the findings will be robust. Details of any statistical advice sought/available.
	Planned statistical analyses	An overview of the planned statistical analyses in relation to the choice of sample size, along with details of any statistical advice available.
Ethical Information section of the Je-S form	Approvals	Indicate whether the appropriate approvals from the local animal welfare and ethical review body (AWERB) and required Home Office licences have been obtained. Note: proposals may be submitted without these in place but they must be obtained prior to any research commencing.
Case for Support	Objectives and experimental outcomes	The primary and any secondary objectives of the study, or specific hypotheses being tested. The primary and secondary experimental outcomes to be assessed.
	Justification of the choice of species/model	An explanation of how and why the animal species and model being used can address the scientific objectives. Relevant information about the animals to be used (e.g. species, strain, sex, developmental stage, weight).

Location	Information	Details
	Justification of the experimental design and statistical framework	A scientific justification of why the numbers of animals to be used, the experimental design chosen, and planned statistical analyses are appropriate to enable the objectives of the study to be met.
Animal Costs section of the Je-S form	Funding requested	The total number of animals requested and the associated purchase and upkeep costs listed.
Justification of Resources attachment	Explanation of funding requested	Overview of how the figure for funding requested was reached. No experimental or statistical details should be included in this section, however a breeding plan may be included to demonstrate how the total number of animals requested was determined.

Applicants should be aware that the animal use aspects of proposals may be subject to specific review during the assessment process. The National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) will be involved in the review (http://www.nc3rs.org.uk/integrating-3rs-publicly-funded-research) of any applications received by EPSRC proposing to use non-human primates, cats, dogs or equines, providing advice on the 3Rs and animal welfare.

Reviewer guidance

The EPSRC's general reviewer guidance notes can be found on our website (http://www.epsrc.ac.uk/funding/assessmentprocess/review/rev/). Where proposals involve the use of animals, reviewers are also asked to comment on whether:

- · Animals are needed for the proposed research
- The potential benefit justifies the adverse effects on the animals
- The numbers are appropriate
- The species is justified

Applications should conform to recognised best practice as set down in the guidance document: Responsibility in the use of animals in bioscience research (http://www.nc3rs.org.uk/responsibility-use-animals-bioscience-research). This requirement applies whether or not the animals are to be purchased with EPSRC funds.