## Planning animal experiments: training opportunities and guidelines

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The group agreed that the 'ARRIVE' guidelines should have resulted in improving the quality of papers submitted to scientific journals and there was some anecdotal evidence that this had occurred. However, it was all still possible to get publications accepted, even in high impact journals, where the guidelines had been only partially applied. There was anecdotal evidence that 'lip service' only was applied to the checking of manuscripts for compliance and may be it was time for AWERBs to take a more active role in scrutinising papers submitted by project licence holders working in their establishments.

There was evidence to suggest that the greater discipline imposed by working to good laboratory practice (GLP) as seen in industry and latterly adopted by academic institutions may have helped to focus on the requirements for meeting ARRIVE standards.

It was noted that the reporting of animal-based information e.g. strain, age, husbandry details etc. were often overlooked in comparison to the biochemical methodologies which were usually fully reported. This partial reporting made it impossible for fellow scientists to truly grasp the details of the methodology and risked needless repetition of studies because incomplete information had been given.

It was clear that the ARRIVE guidelines, published in 2010, had still not been universally utilised in manuscript submissions and were not being enforced by all journal editors, who adopt a 'we only recommend ARRIVE guidelines' approach, rather than taking a hard line and insisting that they be fully utilised.

It would be a sensible starting position to ask that all institutions that provide for PhD positions, should insist that PhD theses involving research animals should be constructed using ARRIVE so that students would have the experience of working towards future publications in the correct way.

It was confirmed by NC3Rs representatives that the ARRIVE guidelines are currently being reviewed and expect publication of the review to include examples of how to submit guideline compliant material.

Anecdotally, where journals had attempted to insist that the guidelines were used, scientists complained of the extra workload and submissions to the journal went down.

It was suggested that AWERBs should examine publications submitted at the mid-term review of Project Licence oversight and take a critical position if the publications did not appear to be ARRIVE compliant.

Interactive on-line training courses would also serve to strengthen compliance with ARRIVE guidelines. Current training course providers dealing with Project licence holder training should also emphasize the importance of guideline compliance.

Courses for project licence holders should also highlight the 10 most common mistakes identified in the preparation of scientific data for publication.

It was noted that Norecopa had released '<u>PREPARE</u>' guidelines that incorporated the current ARRIVE guidelines with the addition of practical recommendations with regard to inter-departmental liaison for room preparation, ordering of materials and equipment, culling, tissue collection and record keeping.