

Name: Anita Bandrowski

Email: abandrowski@ucsd.edu

RRIDs and where they fit into known standards such as the ARRIVE 2.0 guidelines

Anita Bandrowski

University of California, San Diego

The ARRIVE checklist was originally created in 2010, this checklist was created to improve the preclinical animal studies and is one of the most well known and recognized checklists in biomedicine. The checklist included 20 items, with subparts for many of the items, and it has been observed that many authors simply do not follow the guideline even when they state that they do (Leung et al, 2018).

In the spirit of updating and simplifying, the ARRIVE team has released an updated ARRIVE checklist including a simple 10 item checklist (essential 10), the ARRIVE action plans (which help authors plan their experiments). ARRIVE and other checklists cover critical aspects of the experiment that if followed reduce investigator bias and improve our trust in the conclusions of the study. Unfortunately many of these items are not commonly implemented in preclinical laboratory work and that may be a factor in our inability to translate pre-clinical studies (MacLeod, 2011).

By far the most effort that the NC3Rs group, a UK government led group, have made was to simplify and clarify the checklist so that it can be more easily used in practice. The ARRIVE essential 10 checklist is absolutely a way to reduce the number of questions to a manageable number, furthermore the action plans documents have attempted to get the checklists into scientists hands before the study is conducted to improve experimental design at the time when it matters most. Several more practical questions have also been added with examples. One such example is the inclusion of RRIDs, research resource identifiers, for any organism and cell line subject as well as any reagent or tool that is used in the conduct of the study.