

AFLAS Congress 2020 Workshop 4  
Interactive Workshop – Animal Selection and Reporting for Rigor and Reproducibility  
(Sponsored by ICLAS)

June 23, 2020, (2 hours, 1:30 pm – 3:30 pm)  
The Empress Convention Center, 2<sup>nd</sup> Floor, Chiang Mai Ballroom 3

✧ Speakers: Dr. Cory Brayton and Dr. Cynthia Pekow ✧

**Aims:**

1. Select model(s), to achieve your research aims (research Rigor).
2. Report models accurately, to achieve research Reproducibility (and peer reviewed publications)

**Learning Objectives/Outcomes:**

1. Peer review a material and methods section (emphasis animals and husbandry conditions)
2. Write a Materials and Methods section that accurately reports animals, their housing and husbandry conditions, (and experimental procedures involving animals)

**Target Audience:**

Scientists and research veterinarians and personnel who participate in experimental design, research on animals, reporting on research, peer review of publications.

**Format:**

Three research areas will be considered.

1. Immunology /infectious disease research.
2. Cancer research involving immune deficient mice
3. Neurobehavioral research involving learning paradigms.

Each of 3 groups will assess (peer review) the materials and methods section of a manuscript:  
(30min with 1-2 (ICLAS) facilitators per group (USE TIMERS)

1. Is the description adequate to understand what was done, and reproduce it in your lab?
2. Does the description align with ARRIVE guidelines (and or ILAR guidance) re description of the animals, relevant husbandry and environmental conditions, and experimental procedures.
3. Write a list of suggestions to improve Model selection, and the description of the animals, relevant husbandry and environmental conditions, (and experimental procedures involving animals).

Ten (10) min per group max (30 min total) : Present each groups' suggestions, and justifications.

10 min per topic max (30min total) : Further Discuss the groups' suggestions, and justifications.

**References and resources** (available online)

ARRIVE guidelines 2019 revision <https://www.biorxiv.org/content/10.1101/703181v1> and updates .

Also Recommended:

Cell press Star Methods <https://www.cell.com/star-authors-guide>

ILAR Guidance for the Description ... 2011 <https://www.ncbi.nlm.nih.gov/pubmed/22379656>

Radaelli et al. 2019. Mouse immune variation <https://www.ncbi.nlm.nih.gov/pubmed/31197363>

Mouse/Rat gene nomenclature <http://www.informatics.jax.org/mgihome/nomen/>

And <https://www.jax.org/jax-mice-and-services/customer-support/technical-support/genetics-and-nomenclature>

Additional Mouse strain information <https://phenome.jax.org/projects/Brayton1>

