KEY CONCEPTS

Just as members of Institutional Review Boards (IRBs) at research institutions across the US evaluate proposed Human Subjects Research (HSR), so too do members of Institutional Animal Care and Use Committees (IACUCs) evaluate proposed Animal Subjects Research (ASR). One typical and very important facet of IACUC review involves "the 3Rs." Reduction: this commitment is to reducing the number of animals utilized by scientific research. Refinement: this commitment is to refining the animal procedures utilized by scientists—e.g., limiting the suffering such procedures cause, or their invasiveness. Replacement: this commitment is to replacing the use of sentient creatures with non-sentient models, whenever possible, throughout scientific research.

TEXTBOOKS & REPORTS

- Medical Ethics: Accounts of Ground-Breaking Cases (Pence 2015, 7th ed)
- Responsible Conduct of Research (Shamoo & Resnik 2015, 3rd ed)

ASSOCIATED ARTICLES

- Orlans' (1997) "Ethical Decision Making About Animal Experiments" *Ethics Behav* 7(2): 163–171.
- Barnhill, Joffe, and Miller's (2016) "The Ethics of Infection Challenges in Primates" Hast Cent Rep 46(4): 20–26.
- Walker's (2016) "Beyond Primates" Hast Cent Rep 46(4): 28–30.

CASES IN THE NEWS

- Animal Registries—see Monya Baker (2019) writing for Nature
- Undercover Ops—see Jeffrey Brainard (2006) writing for The Chronicle of Higher Education

DISCUSSION QUESTIONS

1. How do potential problems with ASR arise most commonly or significantly for scientific work in your laboratory or research setting?

Which of the 3Rs do you think is most worth considering and pursuing in the design of an ASR study proposal? Can you order them in terms of what you think their relative importance is?
How could your institution's ASR review process be improved? Consider what additions, removals, or alterations you think ought to be made to the process.
What does the history of animal rights activism and public protest of ASR mean for your research? What about the reputation of research in general?
What do you think of the proposed notion of ASR animal, population, and study registries?

POLICY & REPORTING

The **1966 Animal Welfare Act** is the original bit of US federal regulation pertaining to ASR populations, regulation, policy, and procedure.

What is commonly called the **1985** "Improved Standards for Laboratory Animals Act" is that bit of later regulation which introduced IACUC review across the country—something developed as a response to action taken by (e.g.) People for the Ethical Treatment of Animals (PETA) and the Animal Liberation Front (ALF) in the 1980s. This action, and what it exposed, was widely publicized by those entities, to great effect.

But note also that some of that very action taken by members of the ALF and PETA—that which spurred the changes to ASR regulations, leading to widespread IACUC oversight—was shortly afterwards made illegal by the **1989 Farm and Animal Research Facilities Act**.

FINE PRINT

In 1992–3, the National Academy of Sciences (NAS) published a pair of reports on *Responsible Science* (Vol. 1–2), and those reports ushered in an era of ethical oversight centered around the concept of the Responsible Conduct of Research (RCR) at federally-funded American research institutions across the nation. By 2009, the National Institutes of Health (NIH) had mandated that "all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in responsible conduct of research" (NOT-OD-10-019). The National Science Foundation (NSF) recommends—though does not require—something similar. Both agencies suggest that satisfactory RCR instruction tends to cover: research misconduct; conflict of interest; human subjects research; animal subjects research; collaboration and interdisciplinarity; data acquisition and management; authorship, peer review, and publication; mentoring and being mentored; and the relationship between science and society. This handout introduces the topic of **animal subjects research**.





Sponsored by ORI grant IR200063-01 Materials by Prof. J. C. Havstad (CC-BY-NC-SA)

