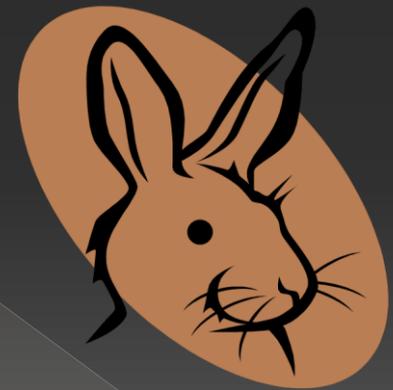


# ANIMALS AS RESEARCH SUBJECTS: DIFFERENT PERSPECTIVES & CONSIDERATIONS

Bioethics & Animals (Spring 2013)  
Laura Guidry-Grimes



**ANDREW ROWAN**

“The Use of Animals in Toxicological Research”

# TOXICOLOGICAL RESEARCH: BACKGROUND



## ○ Historical motivations

- > **1930s:** Lash Lure eyebrow and eyelash dye led to blinding, disfigurement
  - Food, Drug, and Cosmetic Act of 1938
- > **1962:** Thalidomide as mild sedative for pregnant women led to children born without limbs
  - Kefauver Amendment: FDA more proactive in ensuring drug effectiveness, truthful advertising

## ○ Draize eye test

- > Test irritation by putting chemical in one eye, while leaving other eye untouched as control
- > Concerns about legitimacy of predictions based on (e.g.) rabbit cornea



## ○ LD<sub>50</sub>

- > 50-100 animals dosed with test substance, so appx. half die within 2 weeks

# TOXICOLOGICAL RESEARCH: BACKGROUND

- Test safety of foodstuffs, drugs, cosmetics
- Possible endpoints:
  - > General toxicity
  - > Eye and skin irritancy
  - > Chemical's potential to cause mutations
  - > Reproductive problems
  - > Fetal malformations
  - > Chemical's carcinogenicity
  - > Phototoxicity
- Becoming less common to use animal models, esp. for cosmetics
  - > March 11, 2013: any animal testing for cosmetic ingredients prohibited in the EU!

# INSTITUTIONAL ANIMAL CARE & USE COMMITTEE: MORAL DECISION-MAKING

- **Virtue**
  - > Collective honesty, compassion, courage to critique the status quo
- **Deontological Rules**
  - > Determine thresholds for how much and what types of suffering are unacceptable (e.g., rules on anesthesia)
- **Consequentialism**
  - > Complicated calculus – “benefits are the absence of any real or potential damage to humans or the environment” in toxicity testing (913)

## AR's Concerns:

1. Decisions vary greatly across IACUCs
2. Given inadequacies in moral approaches and data, we do not know if we are meeting minimally appropriate standards

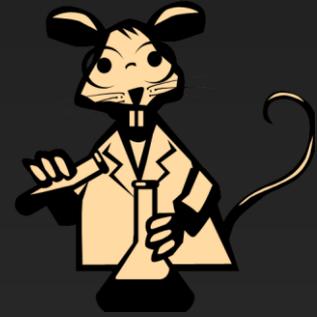
# BARUCH A. BRODY

“Defending Animal Research: An International Perspective”

# Reminder: The Three Rs

- **Refinement** – improve experimental design, decrease inhumane procedures
  - > Develop guidelines for different types of research (e.g., induction of tumors, surgical care, blood collection)
- **Reduction** – reduce number of animals used as much as possible
  - > Number should match what is statistically required (no more and no fewer)
- **Replacement** – develop alternatives to live (esp. sentient) animal subjects whenever possible
  - > E.g., tissue culture, perfused organs, tissue slices, sub-/cellular fractions instead of using whole animals

# A PRO-RESEARCH POSITION



1. Animals have interests which may be adversely affected before, during, or after the research.
2. Adverse effects on animals' interests are morally relevant.
3. The justification for condoning research on animals that would adversely affect them is the benefits that humans would receive from the research
4. In deciding whether a given research protocol is morally justified, human interests should be given greater significance than animal interests.

# SIGNIFICANCE OF PROPOSITION (4)

- Makes research on non-humans far more lax than research on humans
  - > Especially in the U.S. (European principles are more demanding)
- “What this amounts to in the end is that whatever is required for the research is morally acceptable; the 3R principles are to be applied only as long as they are compatible with maintaining scientifically valid research” (319)
- Large range of human interests given priority
  - > E.g., cosmetic testing considered sufficiently beneficial for humans (in the U.S.)

# “GREATER SIGNIFICANCE” OF HUMAN INTERESTS?

Possible interpretations:



## ◎ Lexical-Priority

- > Human interests cannot be sacrificed for the sake of non-humans' interests.

## ◎ Discounting

- > “the same unit of pain counts less, morally, if it is experienced by an animal than it would if it is experienced by a human being, not because of the human's associated experiences but simply because of the species of the experienter” (322)

# ON THE LEXICAL-PRIORITY INTERPRETATION

## ○ Benefits

- > Avoids **incommensurability problem** –difficulty in determining common metric for cross-species experiences
- > **Cross-species ignorance** is not an obstacle.

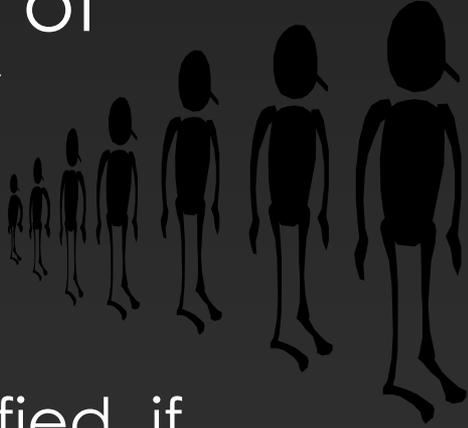
## ○ Problems

- > The benefits are marginal (incommensurability and ignorance are not insuperable obstacles).
- > 3R program ultimately means very little
  - E.g., **refinement** requires researchers invest in environments for lab animals that are (minimally) species-appropriate
  - **Researchers' \$ > Animals' comfort ?**

# ON THE DISCOUNTING INTERPRETATION

- ◎ Best way to make sense of the greater significance of human interests
    - > ...but open to the speciesism attack
  - ◎ We are not generally committed to the equal consideration of interests!
    - > **Special obligations:** **required** to (generally) prioritize ourselves, family, friends, fellow citizens...and our own species
    - > **Personal prerogative:** **permitted** to (generally) prioritize our own projects, interests, aims
- 

# ON THE DISCOUNTING INTERPRETATION

- Lingering problem: Does this line of reasoning lead to discriminatory discounting?
- > DeGrazia's charge:
  - ““Why are racism and sexism unjustified, if species-based partiality is justified?”” (qtd. on 324)
- > Brody's response:
  - “All of these seem, *as long as they are not excessive*, to be within the bounds of acceptable partiality toward our fellows and of acceptable discounting of the interests of others” (324)

# DISCUSSION QUESTIONS

- Imagine you are on an Institutional Animal Care and Use Committee at Georgetown.
  - > Would virtue, consequentialism, or deontological rule-following guide most of your decision-making?
  - > Would you object to (any or all) LD<sub>50</sub> studies?
  - > How problematic is lack of consistency across institutions?
- Has Brody adequately defended the discounting interpretation?
  - > Is there a way to sidestep the discrimination charge?
- Do we have special obligations to other humans merely in virtue of being of the same species?

**QUESTIONS? COMMENTS?**