The Role of Ethics in Experimentation with Animals

Christian E. Newcomer, VMD, DACLAM
Executive Director
What drives our interest in ethics in animal research?

- All rationale human responses and actions can be placed and measured in vast ethical network.
- The non-scientific public is aware of instances where scientific pursuits have gone awry with deleterious effects.
- Public support and confidence in our work is valued and necessary for progress.
- It is best not to look foolish when publicly challenged about the morality and ethics of animal use.
The Cartesian View

- Rene Descartes 17th Century
- Animals have only bodies and not minds: "I think, therefore I am"
- Responses to pain in animals are only physical and mechanical and have no correlation to cognition or sentience
- Therefore, there are no ethical issues related to the use of animals
Are Humans Morally Superior to Animals?

- Species membership ≠ validation that the claim of that species is correct
  - Ŵeight does not make rightŴ
- Species membership is morally irrelevant
- Recent cognitive ethology studies in animals
  - Manipulation and deception
  - Cognitive maps-navigation
  - Symbolism/language, albeit of a basic nature
Immanuel Kant: Notions of Animals

- Deontological view - the fundamental character (nature) of a thing, and not its behavior matter.
- Our capacity of personhood is what makes us morally considerable beings.
- Our representation of I is what raises us infinitely above other beings.
- Still we have duties to animals.
Korsgaard

- Also a deontologist
- Animal attention is fixed on the external world
- Humans can turn their attention internally reflecting on their own desires, feelings, motives, and intellect
- "it is a pain to be in pain. And that is not a trivial fact"
Korsgaard

- When you pity a suffering animal, it is because you are perceiving a reason. An animal's cries express pain, and they mean that there is a reason, a reason to change its conditions. And you can no more hear the cries of an animal as mere noise than you can the words of a person. Another animal can oblige you in exactly the same way another person can. So of course we have obligations to animals. (Korsgaard, 1996, 153)
A Problem with Deontological Analysis

- Some humans do not exhibit the qualities used to justify the cherished superior moral status of humans
  - Infants
  - Advanced autism or Alzheimer’s disease
  - Other cognitive disorders
- What if other beings had abilities superior to humans? Would our moral status be lessened?
The Utilitarian Counter Argument

- Our unique human quality is mirage
- The utilitarian moral position promotes the important dimensions of life: happiness, pleasure, satisfaction with life, lack of pain, suffering, frustration
- Generally applied at the level of the individual
- The cost-benefit approach applies at the group level
Jeremy Bentham
Utilitarian Philosopher

- Noted that other species and certain classes of humans had been degraded as "things" by deontologists

- "What else is it that should trace the insuperable line? Is it the faculty of reason, or perhaps, the faculty for discourse?...the question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?" (Bentham 1781)
Tom Regan- Contemporary Utilitarian and Animal Rights Activist

- And all these dimensions of our life, including our pleasure and pain, our enjoyment and suffering, our satisfaction and frustration, our continued existence or our untimely death—all make a difference to the quality of our life as lived, as experienced, by us as individuals. As the same is true of animals they too must be viewed as the experiencing subjects of a life, with inherent value of their own. (Regan, 1985)
Tom Regan - Contemporary Utilitarian with Strong Animal Rights Leanings

- What matters are the strength and nature of interests, not whose interests these are
Peter Singer and *Animal Liberation*

- Published in 1975, *Animal Liberation* ignited a movement against the exploitation of animals
- Singer introduced the term "speciesism" as the differential and discriminatory treatment of animal species
- Like other utilitarians he argued that all things capable of suffering should be worthy of equal consideration
Peter Singer and *Animal Liberation*

- By his calculus
  - Animals should only be used in research only when the harm done to the animal subject is outweighed by the benefit of the medical advance that the research produces
  - This would be problematic for most research studies
  - In his view, a healthy pig has more value than a severely retarded child
  - A lesser pain inflicted on a human would be justified rather than a more severe pain in a dog
  - If a chimp had 1/100th intelligence of a human, we would sensibly use a human if it benefited 101 chimps
Animal Research
Utilitarian Perspective

- But, the utilitarian position, particularly one that incorporates some kind of multi-factor perspective, might allow some research on animals under very specific conditions.
  - Many suffering humans, high risk YES
  - Cosmetic/product testing NO
  - Detrimental substances taken by "choice" NO
  - Infant nonhuman primate deprivation to study human psychological disorders Possibly
What about animal welfare?

- The dominant approach in Western culture
- The middle ground: not a "rights" approach but a "anti-cruelty" approach
- A pluralistic, political approach to seek a balance between conflicting and contradictory interests of humans and animals, including "lower animals" used by humans as resources
- This approach marginalizes both "animal rights" and Cartesian views as extreme
What about animal welfare?

- The animal welfare view permits the use or exploitation of animals for human ends
- The use comes at a cost: we are obliged to provide “essential,” “adequate” or “strong but fair” provisions for animals
- When does our provisioning become excessive?
- Aren’t some costs (to benefit animals) simply too high?
The Five Freedoms (1967/1979)

Farm Animal Welfare Committee UK

1. Freedom from Hunger and Thirst
2. Freedom from Discomfort
3. Freedom from Pain, Injury or Disease
4. Freedom to Express Normal Behavior
5. Freedom from Fear and Distress
Philosophy, Ethics and Animal Research

- The debate on the use of animals in research is angry and highly polarized in many parts of the world
- Views on this topic vary by:
  - Aims, type, location of research
  - Species of animal used
  - Degree of suffering entailed in the research
- Cost-benefit assessment
- Application of Russell and Burch's 3Rs (1959)
Assessing Pain, Distress and Suffering

- Look comprehensively at the animal’s condition
  - Five freedoms analysis
  - Increasingly sophisticated behavioral or physiological measures
  - Empathy or analogy to human experience
- What about genetically modified animals?
  - Clinical impact of genetic manipulation?
Animal Research: Valid Results?

- Are toxicity tests predictive?
- Why do acute drug reactions happen in humans if safety was predicted by animal studies?
- There are many similarities between human animal biological systems
- Extrapolation does work in many research models and areas of research
Is Inflicting Pain in an Animal Ever Acceptable Morally?

- Consider
  - Degree of Sentience - Pain/pleasure index
  - Cognitive capacity (Impact on Five Freedoms)
  - Capacity to flourish (Satisfy unique needs)
  - Sociability
  - Possession of a life (the value of life itself)

- Are there any limits?
- How are the above weighed and integrated
Is Inflicting Pain in an Animal Ever Acceptable Morally?

- Consider
  - Research goals
  - Probability of success
  - Species of animals proposed
  - Impact on animals
  - Are there alternatives to this approach

- Consideration outcomes:
  - 1) Unconditional
  - 2) Conditional use
  - 3) Moral dilemma
  - 4) Only if animal benefits
Resolving These Difficult Conflict (Nuffield Conclusions)

- The cost-benefit analysis should be rigorously employed
- Absolute limits remain under consideration (bans on particular studies or animal models)
- Elevate and reinvigorate the importance of the 3Rs before proceeding with animal studies
  - Management of pain and suffering is imperative
What Are the 3Rs?

- **Replacement** - Animal models are replaced by non-animal methods, animals of lower sentience or animal tissues used ex-vivo
- **Reduction** - Statistical methods, use of “historical” control groups, genetically-defined animals (improved data grouping, less dispersion), longitudinal studies
- **Refinement** - limit adverse impact through technique
The 3 Rs

- Are there scientific barriers to the pursuit of the 3Rs?
- Could publications do a better job of highlighting the use of 3Rs in studies?
- Might more 3R research funding help?
- Harmonization of test guidelines incorporating methods using 3Rs
- Government and scientific engagement of the public on this topic is needed
Valuable References on This Topic

- The Ethics of Research Involving Animals, Nuffield Council on Bioethics, 28 Bedford Square, London WC1B 3JS, UK