

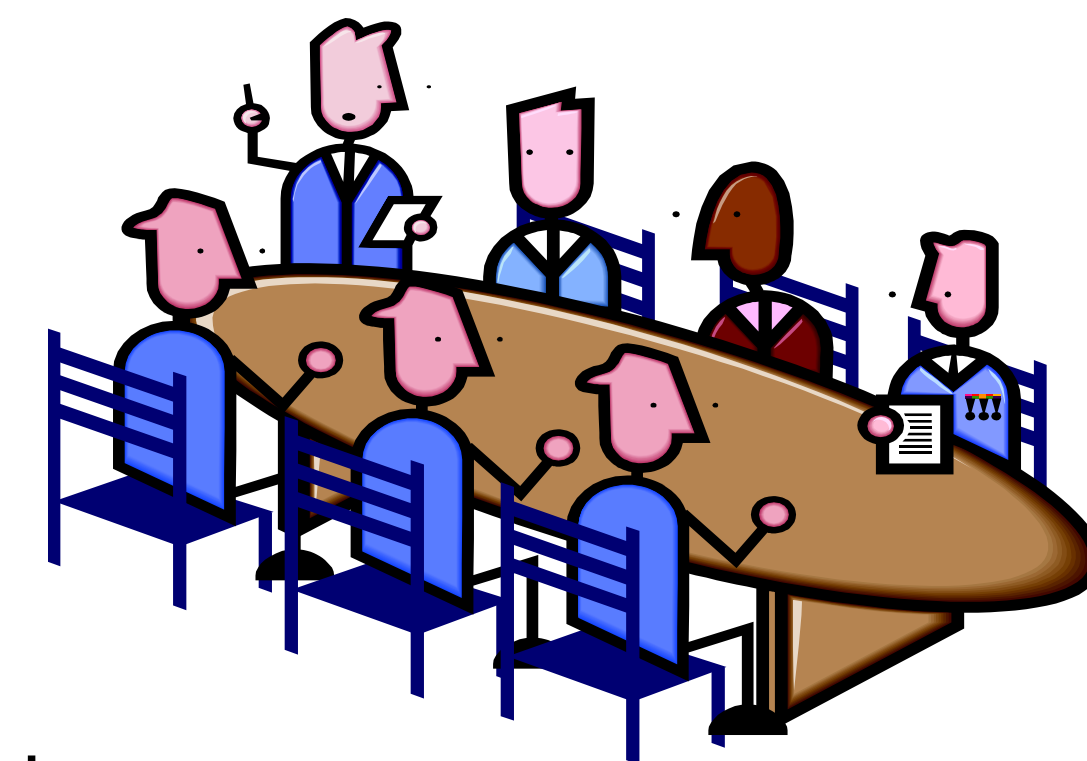
# Analysis of Animal Research Ethics Committee Membership at U.S. Institutions



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## Introduction



- Institutional Animal Care and Use Committees (IACUCs) were federally mandated to review, approve, and monitor animal use in response to growing public concerns about the treatment of animals in laboratories. [1]
- While critical in the oversight process, peer-reviewed research and government audits have highlighted numerous problems in the functioning of IACUCs, including:
  - protocol acceptance bias (e.g., > 98% approval rate; IACUCs approving their own protocols much more readily than outside reviewers) [2–6]
  - bias in favor of scientific and institutional interests [4, 7]
  - frequent approval of experimental protocols that fail to meet government standards [8–10]
- Some have attributed these issues, in part, to imbalances in IACUC membership composition. [4, 7, 11]
- Minimum IACUC membership requirements set forth by federal bodies reflect equal representation of all interests, but these ratios do not need to be maintained.

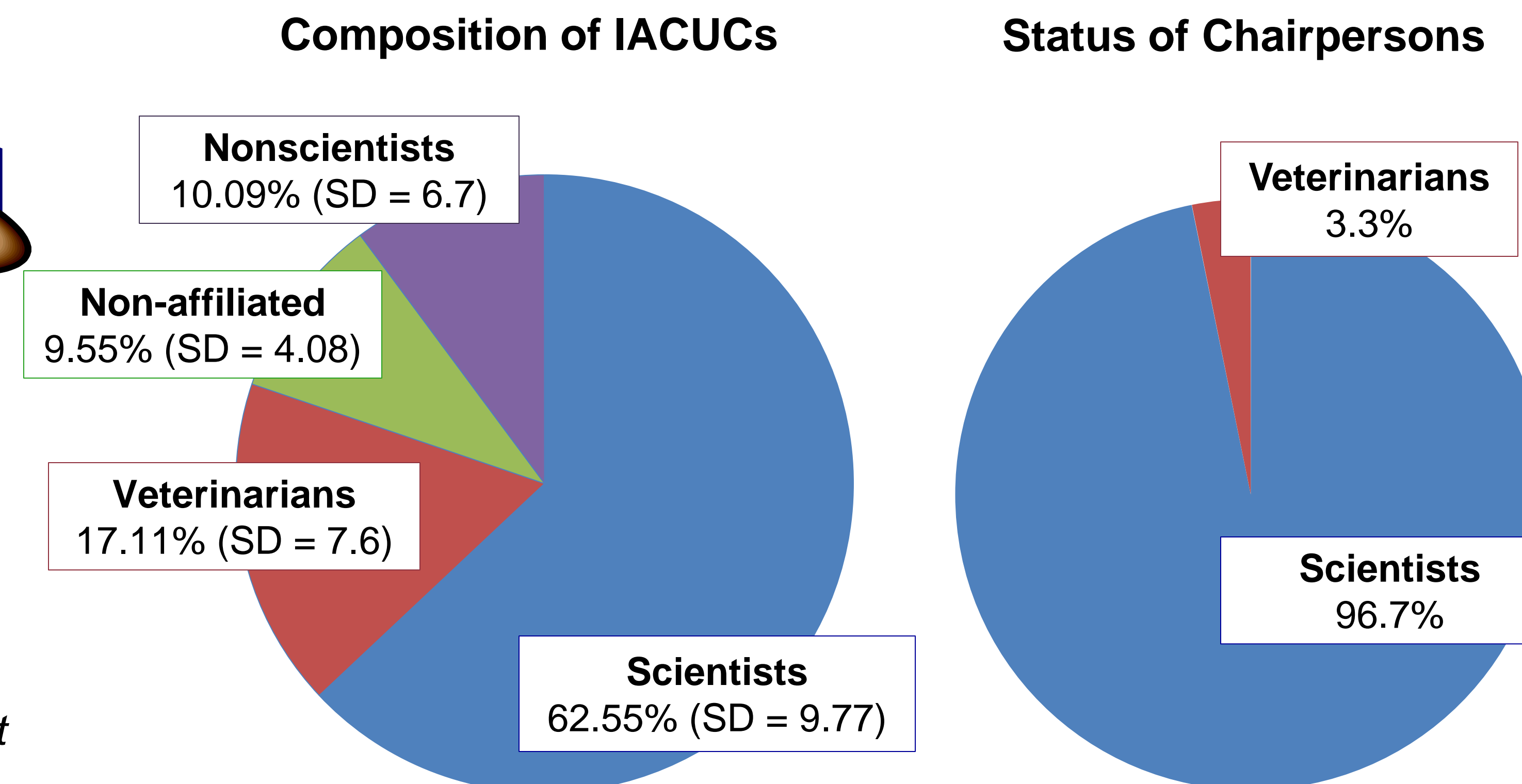
Public Health Service Policy [12]	Animal Welfare Act (AWA) [13]
<b>Five members</b> , including:	<b>Three members</b> , including:
<ul style="list-style-type: none"> <li>One practicing scientist</li> <li>One doctor of veterinary medicine with training/experience in laboratory animal science</li> <li>One nonscientist</li> <li>One non-affiliated member</li> </ul>	<ul style="list-style-type: none"> <li>The chairperson</li> <li>One doctor of veterinary medicine with training/experience in laboratory animal science</li> <li>One non-affiliated member</li> </ul>

**Current study**  
**Evaluation of IACUC membership composition at the top 25 NIH-funded institutions**

## Methods

- Using the federal Freedom of Information Act, IACUC rosters were obtained from Animal Welfare Assurances filed by each of the 25 institutions with the National Institutes of Health (NIH) as of January 2014. IACUC members were classified into four categories defined by the NIH:
- scientists** (a person experienced in research involving animals)
  - nonscientists** (a person from the institution whose primary concerns are in a non-scientific area)
  - non-affiliated members** (a person not affiliated in any way with the institution)
  - veterinarians** (many of whom are involved in animal research)

## IACUC Composition



## IACUCs at Top 25 NIH-funded Institutions

	Scientists	Veterinarians	Non-affiliated members	Nonscientists	Undesignated members	Is chair a scientist?
Johns Hopkins University	11	3	1	1(1)**	0	Y
University of California San Francisco	13	3	2	0(1)**	0	Y
University of Pennsylvania	9	5	1	3(1)**	0	Y
University of Washington	9	5	1	0(1)**	6#	Y
University of Michigan	16	2	2	3(2)**	0	Y
University of Pittsburgh	22	6	2	4	0	Y
University of North Carolina Chapel Hill	7	1	1	1	1#	Y
University of California San Diego	16	1	2	1	3#	Y
Stanford University	5	3	2	1	0	Y
Yale University	9	2	2	4	0	Y
University of California Los Angeles	10	2	3	2(3)**	0	Y
Duke University	22	4	1	1	0	Y
Massachusetts General Hospital	17	4	2	1(2)**	0	Y
Washington University	10	2	2	2(1)**	0	Y
Brigham and Women's Hospital and Harvard Medical School	11	3	2	2(2)**	3#	Y
Columbia University Health Sciences	13	3	2	3	0	Y
Vanderbilt University Medical Center	17	2	2	5	0	Y
University of Minnesota	14	1	1	0(1)**	1#	Y
Emory University	14	7	2	2	0	Y
University of Wisconsin Madison†	37	17	5	2	0	4Y/1N†
Scripps Research Institute	5	2	2	1(1)**	0	Y
Mount Sinai School of Medicine	11	4	1	2	0	Y
Oregon Health & Science University	15	5	2	3	5#	Y
Mayo Clinic	9	3	1	1	0	Y
University of Colorado Denver	14	3	3	7	3#	Y

\*\* Number in parentheses reflects individual IACUC members who were designated as both nonscientists and non-affiliated members but were counted only as non-affiliated members for this study.  
 # Data points excluded due to missing information.  
 † UW-Madison has five IACUCs that were combined for this analysis. Four of the five chairs were animal researchers.

## Discussion

- IACUCs at leading U.S. institutions do not maintain the balance of interests included in minimum federal membership requirements.
- IACUCs in this study and their leadership are composed of a preponderance of animal researchers. In general, 80 percent of IACUCs are composed of people directly involved in animal research (scientists and laboratory veterinarians).
- Because of this kind of imbalance, non-affiliated IACUC members have previously reported that they feel their input is marginalized. [4, 14, 15]
- In other countries, IACUCs are required to maintain a balance between these various members. In Sweden and Australia, one half and one third of animal research oversight committees, respectively, must be composed of non-affiliated laypersons and animal welfare experts. [16, 17]

## Conclusions

- The overwhelming presence of animal research and institutional interests on IACUCs may contribute to previously documented committee approval bias and reduces the overall objectivity and effectiveness of the oversight system.
- This imbalance also does not allow IACUC membership to reflect the range of dynamically changing public attitudes about the use of animals in experimentation. [18]
- To ensure fair deliberations and maintain public confidence in the objectivity of the animal research review process, IACUC composition at these and other institutions should be reformed to equally represent the interests of all stakeholders.



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