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More than 250 words may jeopardize publication

Abstract Length May Limit Future Publication Possibilities

Accounting from p. 2

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Burnette suggests all PIs periodically review university policy for sponsored grants and contracts (F10205). This can be found at http://www.tennessee.edu/policy.2


Research at the University of Tennessee College of Veterinary Medicine

Discoveries have been remarkably successful and well-received in the college, and has the potential for presenting a variety of issues pertinent to research and our interactions with funding agencies. Federal agencies and scientific journals are placing increasing emphasis on the “responsible conduct of research,” and we have decided to use Discovery as a vehicle to address some of the most current ethical concerns in research and sponsored programs. This special edition addresses a few of the “hot” issues, and we hope you will find it informative and interesting read.

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Imagine you pay Dr. Demanding from Allknowing University to do some laboratory tests for your research project. When writing your manuscript to publish the results, you realize you don’t know Dr. Demanding’s methods, so you ask him to describe them. He refuses unless he is made a co-author on the paper. What do you do?

Avoid Falling Prey to Cryptomesnia

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The University of Tennessee
College of Veterinary Medicine

Special Edition: Ethics in Research
Materials and Cryptomnesia

The UTCVM Office of Laboratory Animal Care (OLAC) recommends enrichment materials for all laboratory small animals, goats, horses, and swine. Faculty and staff at the OLAC are available to provide guidance to any personnel involved in the care and use of these animals, and they invite inquiries from investigators prior to animal care and use protocol submission; such consultations will ensure best practices and minimize the time from submission to approval. Additionally, in conjunction with the university’s Institutional Animal Care and Use Committee, the OLAC ensures the institution’s compliance with applicable laws, regulations, and policies. The OLAC is located in 336 Ellington Plant Science Building, tel: 4-5634.

Dr. William Hill contributed to this article.

Unintentional. In that same mid-1990s study, 11% of the scientists thought it was ethical to use an uncredited idea from a proposal they reviewed if it was an oversight; 20.3% considered it ethical to accidentally copy ideas or text from published material without giving credit.2 Those responses, however, were based on plagiarizing written texts. When asked about ideas they had not seen in print, respondents’ ethical views weakened even more. Approximately 33% responded that unintentionally failing to give proper attribution for a research idea “obtained in casual conversation with a colleague” is ethical, whereas 37% thought it was ethical to base research on a paper they heard about at a conference, if the failure to give the presenter proper credit was an oversight.2

However, if we were told that an uncredited presenter, we might feel differently about the oversight. To avoid these types of unintentional plagiarism, it is good practice to write down ideas obtained from listening and attribute those ideas and/or ask the speaker’s permission to use them. Although it can be awkward to start taking notes in the middle of a conversation, always keeping an “ideas” file or notebook close by makes it easy to write down ideas after the conversation. This same idea also contains ideas from informal sources such as newsletters, e-mails, or personal corre-

How do we ensure integrity in authorship reporting?


Cryptomnesia

3.etal. AASV, ASH, AVMA. Behaviour of laboratory mice in different housing conditions when allowed to self-select their housing. Lab Anim 2006;40:392-399.
Laboratory Animal Enrichment: Results vs. Well-Being
Does a Balance Exist?

Undoubtedly, animal-based research has significantly impacted the safety, longevity and quality of both human and animal life. Many, if not all, of us are the direct beneficiaries of advances that would have been impossible without the use of animals. As indebted recipients of such life-giving knowledge, we share the responsibility to ensure the appropriate and humane treatment of animal subjects.

Since the early 1960s, animal care and use programs in the United States have experienced rapid evolution. This growth, coupled with the public’s interest in the use of laboratory animals and the need for reliable data from animal subjects facilitated the passage of laws, regulations, policies, and standards effectively regulating animal use. First passed by Congress in 1966 and subsequently amended four times, the Animal Welfare Act and the accompanying animal welfare regulations mandate and describe the minimally acceptable standards of animal care; as a USDA-registered research facility, the University of Tennessee must comply with the standards set forth therein.

Additionally, because the university receives support through the U.S. Public Health Service (PHS) for animal-based activities, the institution must provide assurance of compliance with the PHS Policy on Humane Care and Use of Laboratory Animals and the Guide for the Care and Use of Laboratory Animals produced by the National Resource Council.

However, because animal welfare act regulations do not require psychological enrichment activity for any laboratory animal except non-human primates, one recent subject of interest in relation to laboratory animal care is maintaining an enhanced environment that may ensure better health and welfare for the animals.

In 2005, Benefiel, et al. questioned the benefits of what they call “housing supplementation” for laboratory animal well-being and research results. The authors remind us that the preferences of animals might not be what are best for their well-being. To see the authors’ point, we need only think about what a dog would do with a three-layer, chocolate cake if given the opportunity.

Benefiel, et al. worry that many of the suggestions for housing supplements may be based on animal preferences without research to support them. Furthermore, they assert that rats exposed to enriched environments within their own laboratory weigh more, eat more, and experience more rapid maturation of the long bones than the rats in un-enriched housing. Obviously, these changes could immediately confound experimental results within the same laboratory, between laboratories, and over time.

On the other hand, Weed and Raber call for a balance between scientifically valid data [and] animal well-being,” citing a need for better documentation of environment in research reports to account for the variables. In addition, the authors have observed the rodents in their laboratories are less apprehensive and easier to handle when given enrichment like nesting material or chew toys.

A 2006 report on the effect of available activity for caged mice asserts that when housed in a larger cage with more activity options like a running wheel, mice experience less anxiety. This conclusion is based on the lower frequency with which mice self-administered an anxiolytic (anti-anxiety) drug placed in their drinking water. Mice in cages with unpredictable or no enrichment chose the anxiolytic more often than those in cages where enrichment activity was available.
**GENERAL RESOURCES**

**Ethical Conduct in Biomedical Research: A Handbook for Biomedical Graduate Studies Students and Research Fellows, 3rd ed.** Published by the Biomedical Graduate Studies Program of the University of Pennsylvania

http://www.med.upenn.edu/bgs/documents/BIOETHICSHANDBOOK4-04.pdf

Online Ethics Center for Engineering and Science at Case Western University

http://onlineethics.org/reseth/index.html

Contains essays, scenarios, and educational resources

Oklahoma State University’s “Conducting Research Responsibly”

http://compliance.vpr.okstate.edu/conducting%20research%20responsibly.pdf

While at times university specific, this two-page document provides general responsibilities for principal investigators in several different scenarios.

**GRANT ACCOUNTING RESOURCES**

National Institutes of Health Office of Extramural Research’s “Frequently Asked Questions Regarding the Usage of Personal Months”

http://grants.nih.gov/grants/policy/person_months_faqs.htm

UTIA Sponsored Research Regulations & Cost Principles

http://taes.tennessee.edu/sponsoredresearch/regs.htm

**AUTHORSHIP RESOURCES**

Harvard Medical School’s “Authorship Guidelines”

http://www.hms.harvard.edu/integrity/authorship.html

Council of Science Editor’s Taskforce on Authorship white paper

http://www.councilscienceeditors.org/services/atf_whitepaper.cfm

**LABORATORY ANIMAL RESOURCES**

University of Tennessee Office of Laboratory Animal Care

http://www.vet.utk.edu/research/olac/

American Association for Laboratory Animal Science

http://www.aalas.org/index.aspx

Institute for Laboratory Animal Research

http://dels.nas.edu/ilar_n/ilarhome/
Cutting Corners on Percent Effort Allocation Not Worth It

When an organization expends more than $500,000 of federal funding annually, a financial audit of its grant spending is required by law.

Considering just 17 faculty members in the college’s Center of Excellence in Livestock Diseases and Human spent nearly $3 million in federal funding alone in 2006, it is obvious that UT is required to do annual audits.

Unfortunately, federal funding agencies, and taxpayers in general, want to know what is being done with their money, which is why the university requires that grant applications have an additional detailed budget, regardless of agency requirements.

Following that budget, though, is just as important, as the University of Alabama at Birmingham (UAB) discovered in 2005 after it was asked to refund $3.39 million to the U.S. government. The U.S. Department of Justice contends that researchers at UAB overstated their percent effort allocation, a violation under the False Claims Act.

The most common grant accounting violations are related to improper reporting of percentage (person months) of work effort, resulting in researchers devoting less time to the research project than they reported. However, effort allocation can usually be changed from year to year as long as it is reported and approved by the funding agency.

See p. 6

Authorship from p. 1

The question of authorship was formally addressed by the Council of Science Editors’ (CSE) Task Force on Authorship. They looked at the personal, social, medical, and legal problems of biomedical authorship in an effort to determine some possible solutions.

The task force identified what they consider the two major problems of authorship: “misattribution of credit and failure to take responsibility.” For the sake of brevity, we will focus on credit here. The International Committee of Medical Journal Editors (ICJME) has specific guidelines for authorship: a true author, according to ICJME standards, is “someone who has made substantial intellectual contributions to a published study.” Specifically, ICJME recommends that all three of these conditions be met before including an author’s name in the byline:

• “substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data.”

• “drafting the article or revising it critically for important intellectual content.”

• “final approval of the version to be published.”

Furthermore, ICJME asserts that an author should not be someone who only secured funding, collected data, or supervised a research group. As the CSE task force points out, though, senior researchers often devote much of their time to obtaining funding, and why would they work to get funding if they were not to be included as authors?

The acknowledgement section is the place for the scientific advisors, according to ICJME, and that is also the place to recognize purely technical writing help, animal care staff, and data collectors.

How do we ensure integrity in authorship reporting? That is yet to be decided in any level of surety.

However, some journals, like JAMA, now require specific contributions of each author to be described, and these contributions are published with the article. JAMA sought to reduce the occurrence of honorary authorship and ghost writing (failing to identify a qualifying author), among other “deceptive practices.”

Still, there are no simple solutions. After all, faculty depend on publications for tenure and funding.

These issues are prevalent in today’s peer-reviewed literature.

However, students are not the only ones who commit plagiarism. Students are not the only ones who plagiarize. Despite a mid-1990s study finding that 100% of surveyed molecular and cellular biologists agreed that knowingly using ideas from a written property without attribution is unethical, the media has made us fully aware that a few faculty plagiarize, too.

For example, a UT at Chattanooga history instructor was recently accused of plagiarizing several parts of a New Hampshire author’s 1994 book, and the UT Press has since stopped production on the instructor’s book. A full investigation is ongoing, and while the instructor says that plagiarism was unintentional, he admits to “grave oversights” in documentation.

Nevertheless, the laboratory animal care process and oversight are also integral to the design and execution of biomedical research.

Cryptomnesia from p. 1

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