
University of Arizona Program in Research Integrity Education Monthly Newsletter

A Federally Mandated Compliance Education Program

January 1, 2007

Volume 7, No. 1

This month the Program in Research Integrity Education (P.R.I.E.) newsletter focuses on the topic of "Peer Review." Each month we are continuing to highlight one of the nine core instructional areas in the Responsible Conduct of Research (RCR).

The information presented below is authored by Michael Kalichman and P. D. Magnus and may be viewed at the *RCR Education Resources* web site, which is: <http://rcrec.org/r/index.php>.

The P.R.I.E. staff wishes you all a healthy, happy and prosperous 2007!

Responsible Conduct of Research (RCR)

P.D. Magnus and Michael Kalichman,
September 2002

Peer Review

Background

For much of the last century, peer review has been the principal mechanism by which the quality of research is judged. In general, the most respected research findings are those that are known to have faced peer review. Most funding decisions in science are based on peer review. Academic advancement is generally based on success in achieving peer-reviewed publications and funding; further it involves direct peer review of the candidate's academic career. In short, research and researchers are judged primarily by peers.

The process is based on the notion that, because much of academic inquiry is relatively specialized, peers with similar expertise are in the best position to judge one another's work. This mechanism was largely designed to evaluate the relative quality of research. However, with appropriate feedback, it can also be a valuable tool to improve a manuscript, a grant application, or the focus of an academic career. Despite these advantages, the process of peer review is hampered by both perceived and real limitations.

Critics of peer review worry that reviewers may be biased in favor of well-known researchers or researchers at prestigious institutions, that reviewers may review the work of competitors unfairly, that reviewers may not be qualified to provide an

authoritative review, and even that reviewers will take advantage of ideas in unpublished manuscripts and grant proposals that they review. Many attempts have been made to examine these assumptions about the peer review process. Most have found such problems to be, at worst, infrequent [e.g., Abby et al., 1994; Garfunkel et al., 1994; Godlee et al., 1998; Justice et al., 1998; van Rooyen et al., 1998; Ward and Donnelly, 1998]. Nonetheless, problems do occur.

Because the process of peer review is highly subjective, it is possible that some people will abuse their privileged position and act based on unconscious bias. Reviewers may be less likely to criticize work that is consistent with their own perceptions [Ernst and Resch, 1994] or to award a fellowship to a woman rather than a man [Wennerds and Wold, 1997]. Further, peer review does not do well at detecting innovative research or filtering out fraudulent, plagiarized, or redundant publications [reviewed by Godlee, 2000].

Despite its flaws, peer review does work to improve the quality of research. Considering the possible failings of peer review, the potential for bias and abuse, how can the process be managed so as to minimize problems while maintaining the advantages?

Rules and regulations

Peer review is governed by federal regulations in three respects. First, federal misconduct regulations can be invoked if a reviewer seriously abuses the review process. Second, peer review for the grant review process prohibits review by individuals with conflicts of interest. Third, a proposed requirement would make discussion of peer review part of instruction in the responsible conduct of research [Office of Research Integrity, 2000].

Despite these regulations, much of peer review is not directly regulated. It is governed instead by guidelines and custom.

Most organizations reviewing research have specific guidelines regarding confidentiality and conflicts of interest. In addition, many organizations and institutions have guidelines dealing explicitly with the responsibilities of peer reviewers, such as those of The American Chemical Society (1996), the Society

for Neuroscience (1999), and the Council of Biology for Editors (CBE Peer Review Retreat Consensus Group, 1995).

Principles

Academic integrity depends on peer review.

A published paper reflects not only on the authors of that paper, but also on the scientific community as a whole. High standards for academic work can only be maintained if scientists critically assess one another's work.

Effective peer review depends on academic integrity

Peer review must be conducted so that better scientific work is the result. Candidates for publication, grant funding, and career advancement have a right to a timely response from competent, unbiased reviewers.

Responsible peer review is a researcher's responsibility.

By definition, peer review depends on the willingness of peers to participate as reviewers, usually without financial compensation. Participation in the research community thus involves a responsibility to share in the task of reviewing the work of peers. In addition to being an ethical responsibility, it should be noted that experience as a reviewer also has practical advantages. These include the opportunity to better understand the peer review system, to become more aware of the work of peers, and to develop lines of communication with other peer reviewers.

Guidelines

Timely response

Reviewers should make every effort to complete a review in the time requested. If it is not possible to meet the conditions for the review, then the reviewer should promptly decline or should see if some accommodation can be made. Research reports, grant applications, and academic files submitted for review all represent a significant investment of time and effort. Frequently, documents under review will contain timely results that suffer for a delay in the review process.

Competence

Reviewers who realize that their expertise is limited have a responsibility to make their degree of competence clear to the editor, funding agency, or academic institution asking for their opinion. A reviewer who does not have the requisite expertise is at risk of accepting a submission that has substantial deficiencies or rejecting one that is meritorious. Such errors are a waste of resources and hamper the scientific enterprise.

Bias

Reviewers' comments and conclusions should be based on a consideration of the facts, exclusive of personal or professional bias. To the extent possible, the system of review should be designed to minimize actual or perceived bias on the reviewers' part. If reviewers have any interest that might interfere with an objective review, then they should either decline a role as reviewer or declare the conflict of interest to the editor, funding agency, or academic institution and ask how best to manage the conflict of interest.

Confidentiality

Material under review should not be shared or discussed with anyone outside the designated review process unless approved by the editor, funding agency, or academic institution. Material submitted for peer review is a privileged communication that should be treated in confidence. While it is expected that the administrators and reviewers will have access to the material submitted, authors, grant applicants, and candidates for academic review have a right to expect that the review process will remain confidential. Reviewers unsure about policies for enlisting the help of others should ask.

Security

A reviewer should not take advantage of material available through the privileged communication of peer review. One exception is that if reviewers become aware on the basis of work under review that a line of their own research is likely to be unprofitable or a waste of resources, then they may ethically discontinue that work [American Chemical Society, 1996; Society for Neuroscience, 1999]. In such cases, this decision should be communicated to the parties requesting the review.

Beyond this exception, every effort should be made to avoid even the appearance of taking advantage of information obtained through the review process. Potential reviewers concerned that their participation would represent a substantial conflict of interest should decline the request to review.

Constructive criticism

Reviewers' comments should acknowledge positive aspects of the material under review, assess negative aspects constructively, and indicate clearly the improvements needed. The purpose of peer review is not merely to judge the submitted work, but also to promote better work within the scientific community. A review does not exist to demonstrate the reviewer's proficiency in identifying flaws, but to help the authors or candidates identify and resolve weaknesses in their work.

Resources

Works cited

- Abby M, Massey MD, Galandiuk S, Polk HC (1994): Peer review is an effective screening process. *JAMA* 272: 105-107.
- American Chemical Society (1996): C. Ethical obligations of reviewers of manuscripts. In: ACS Ethical Guidelines
<http://pubs.acs.org/instruct/ethic.html>
- CBE Peer Review Retreat Consensus Group (1995): Peer review guidelines - A working draft. *CBE Views* 18(5): 79-81.
- Ernst E, Resch KL (1994): Reviewer bias: a blinded experimental study. *Journal of Laboratory and Clinical Medicine* 124(2): 178-82.
- Garfunkel JM, Ulshen MH, Hamrick HJ, Lawson EE (1994): Effect of institutional prestige on reviewers' recommendations and editorial decisions. *JAMA* 272: 137-138.
- Godlee F, Gale CR, Martyn CN (1998): Effect on the quality of peer review of blinding reviewers and asking them to sign their reports. *JAMA* 280: 237-240.
- Godlee F (2000): The ethics of peer review. In (Jones AH, McLellan F, eds.): *Ethical Issues in Biomedical Publication*. Johns Hopkins University Press, Baltimore, MD, pp. 59-84.
- Justice AC, Cho MK, Winker MA, Berlin JA, Rennie D, PEER Investigators (1998): Does masking author identity improve peer review quality? *JAMA* 280: 240-242.
- Office of Research Integrity (2000): PHS Policy on Instruction in RCR.
<http://ori.hhs.gov/html/programs/rcrcontents.asp>
- Society for Neuroscience (1999): 2. Reviewers of manuscripts. In: *Responsible Conduct in Scientific Communication*.
<http://www.sfn.org/guidelines>
- van Rooyen S, Godlee F, Evans S, Smith R, Black N (1998): Effect of blinding and unmasking on the quality of peer review. *JAMA* 280: 234-237.
- Ward JE, Donnelly N (1998): Is there gender bias in research fellowships awarded by the NHMRC? *Medical Journal of Australia* 169: 623-624.
- Wennerds C, Wold A (1997): Nepotism and sexism in peer review. *Nature* 307: 34

Further resources

- Jefferson T, Godlee F (1999): *Peer Review in Health Sciences*. BMJ Books, London, 280 pp.
- Lock S (1985): *A Difficult Balance: Editorial Peer Review in Medicine*. ISI Press, Philadelphia.
- Public Health Service (2000): Sec. 50.102 Definitions. Subpart A. Responsibility of PHS Awardee and Applicant Institutions for Dealing With and Reporting Possible Misconduct in Science. Part 50—Policies of General Applicability. Chapter I—Public Health Service, Department of Health and Human Services. Title 42—Public Health. 42CFR50.102, p. 168.
http://www.access.gpo.gov/nara/cfr/waisidx_00/42cfr50_00.html

- Public Health Service (2000a): Part 52h—Scientific peer review of research grant application and research and development contract projects. Chapter I—Public Health Service, Department of Health and Human Services. Title 42--Public Health. 42CFR52h, p. 249
http://www.access.gpo.gov/nara/cfr/waisidx_00/42cfr52h_00.html
- Office of Science and Technology Policy (2000): Federal Policy on Research Misconduct: Notification of Final Policy. *Federal Register* December 6, 2000 65(235): 76260-76264.
- Varki A (1994): The Screening Review system: Fair or Foul? (Editorial) *J Clin Invest* 93: 1871-1874.

Proceedings: International Congress on Peer Review

- Selected proceedings from the First International Congress on Peer Review in Biomedical Publication (1990): *Guarding the guardians: research on editorial peer review*. May 10-12, 1989, Chicago, Ill. *JAMA* 263(10):1317-1441.
- The 2nd International Congress on Peer Review in Biomedical Publication. *Proceedings* (1994): Chicago, Illinois, September 9-11, 1993. *JAMA* 272(2):91-173.
- *Proceedings of the 3rd International Congress on Peer Review in Biomedical Publication* (1998): Prague, Czech Republic, September 1997. *JAMA* 280(3):213-302.

Next month the featured RCR topic will be:
"Collaboration"

UNIVERSITY OF ARIZONA
RESEARCH SUPPORT SERVICES GROUP
(RSSG)

HUMAN SUBJECTS
PROTECTION PROGRAM

≧Highlights≦

What Institutional Review Board (IRB) Members Do to Prepare for an IRB Meeting

The University of Arizona Human Subjects Protection Program has four Institutional Review Boards (IRBs). Projects that are classified as greater than minimal risk are sent to the IRB for review and discussion at a fully convened meeting. It is helpful for University researchers to understand what occurs prior to the IRB meeting and what preparation is required of the IRB member.

Prior to each IRB meeting the member is asked to conduct a systematic review of the application material. Although every member of the IRB is required to review all application materials, the University of Arizona uses a Primary and Secondary review system. These individuals are assigned as special reviewers for each protocol that will be presented at the meeting and are responsible for reviewing the application in detail and presenting a

brief summary of the study. The Primary and Secondary reviewers may contact the investigator with questions before the IRB meeting and for responding to questions raised by other IRB members. Experienced IRB members may use the following guidelines as a Primary or Secondary reviewer:

- Read and study the consent form to understand the important aspects of the study that will be explained to potential subjects in lay language. This review orients the reviewer to the study context.
- Review the summary of the study (Project Review Form/Project Approval Form). This form should contain key aspects of the elements needed for IRB approval.
- Review the supporting material that backs up the information presented in the study plan. This includes review of prior research that supports the current research plan or validates the study procedures.
- Get answers to questions before the meeting. This may include discussion of the protocol with the investigator for clarification or for further information. Collegial interaction between the investigator and Primary/Secondary reviewer will facilitate the IRB review and promote respect for the local IRB.

Each Primary and Secondary reviewer is given a review template for noting comments about the study plan, supporting material and consent document. The template follows regulations found in 21 CFR 50 (FDA) and 45 CFR 46 (DHHS) and helps the reviewer organize the review, reminds the reviewer what issues have and have not been addressed, and is useful for presenting the review at the full committee meeting.

IRB member preparations for the meeting are important items to consider when striving to make the IRB meetings efficient and effective and to provide the best process for maintaining a positive connection with investigators.

R. J. Ambdur & E. A. Bankert. (2006). Guidelines for Review, Discussion, and Voting. In E. A. Bankert and R. J. Amdur (Eds.), Institutional Review Board Management and Function (pp. 187-190). Sudbury, MA: Jones and Bartlett.

Good Laboratory Practices (GLP)

Good Practices come into play

- ✚ In regulated environments such as preclinical and clinical drug development, regulations and guidelines provide the framework of what is allowed and expected by authorities.

- ✚ The ultimate goal of any development process in the research laboratory or pharmaceutical industry is to register products on the market that have been proved to be safe and effective and that are produced in accordance with adequate manufacturing processes.
- ✚ This is where the “**good practices**” **come into play** which is the cornerstone of **quality assurance**: Good Laboratory Practices (GLP), Good Clinical Practice (GCP), and Good Manufacturing Practice (GMP).
- ✚ Contact for information and guidance for good practices....

Marilyn M. Marshall, SpM
Quality Assurance Officer
Office of the Vice President for Research
621-1469 (p), 621-1429 (f)



News from HIPAA.....

2006's

10 Biggest Health Care Security Breaches

Reprinted from the December 2006 issue of [REPORT ON PATIENT PRIVACY](#), the Industry's most practical source of news on HIPAA patient privacy provisions.

From stolen laptop computers to CDs with patient information accidentally misplaced, 2006 was the year many health care providers and insurers experienced data breaches. These incidents typically stemmed from inadequate data security, and staff who were not trained to protect patient information, says Paul Feldman, deputy director of the Health Privacy Project, a privacy advocacy group. Here's a look at 10 of the most high-profile alleged privacy and security violations of the year.

(1) Providence Health System this year announced it would reimburse Oregon more than \$95,000 after a nine-month investigation into the theft of computer disks and tapes that contained information on 365,000 Providence Home Services patients. In response to the incident, Providence notified patients, established a toll-free hotline number to handle questions and provided credit monitoring services. "We're grateful that there have been no verifiable instances of the data on the disks and tapes being used for identity theft," said Russ Danielson, chief executive of Providence Health System - Oregon Region.

(2) Perhaps no other data security misstep grabbed more headlines in 2006 than that of the Department of Veterans Affairs' loss of data on 26.5 million veterans and some of their spouses. On May 22, the VA announced that one of its data analysts had a laptop computer stolen from his home. Although

the VA believes that the thief was not targeting the data, the department is providing one year of free credit monitoring for people whose information may have been stolen. Further compounding the department's data security woes, a VA subcontractor in August told the department that a desktop computer containing personal information for veterans was missing from the company's offices.

The subcontractor, Unisys Corp., was hired to assist in insurance collections for the VA's medical centers in Pittsburgh and Philadelphia. The computer may have contained claims data and Social Security numbers (SSNs) for about 5,000 people treated in Philadelphia, 11,000 people treated in Pittsburgh and 2,000 deceased patients. It may also have contained information on another 20,000 people treated in Pittsburgh.

In response, the VA has revamped its employee security training programs, encrypted all laptops and is exploring other security measures, such as requiring two forms of identification to remotely access data.

(3) Sisters of St. Francis, a hospital chain in Indiana and Illinois, experienced a data breach after a contractor that was working on medical billing records took three CDs containing the personal and medical billing information on 260,000 patients and accidentally left the CDs in a laptop computer bag she returned to a store. Three days later, a minister purchased the bag, found the CDs and contacted the Sisters of St. Francis. The hospital chain says it's unlikely that any information was compromised.

(4) Vassar Brothers Medical Center in Poughkeepsie, N.Y., in June had a laptop computer stolen and notified 257,800 former patients that their information could have been compromised. Luckily, investigators later found that the stolen laptop did not contain any identifying patient information and that the hospital's Master Patient Index (MPI) was never loaded onto the laptop on the day it was stolen. The hospital no longer stores the MPI on laptop computers.

(5) Kaiser Permanente sent letters to 25,000 patients who were treated at Kaiser Permanente's South Bay Medical Center in California after two contract employees were arrested for allegedly stealing their personal information. The two employees worked for QuestNine Inc., a photo-copying company that Kaiser used to copy patients' medical records. The women also handled copies of medical record requests. The employees are accused of using patient information to apply for credit cards.

Separately, Kaiser had a laptop stolen from one of its facilities that contained information on patients who use hearing aids. In response, Kaiser is updating its policies about what type of data can

be stored on laptop computers, according to a spokesperson for the organization.

(6) Georgia-based PSA HealthCare, a provider of pediatric home care services, in July reported that a laptop containing 51,000 patients' personal information was stolen from an employee's car. The computer contained personal information on current and former patients, including their names, addresses, SSNs and personal health information. The laptop computer was password protected. PSA notified the affected individuals and said it would make improvements to its data security policies and procedures.

(7) In August, a nurse at Beaumont Hospital in Detroit had a laptop stolen from her car. The laptop contained the names and medical records and SSNs of more than 28,000 Beaumont home care patients. After Beaumont officials went to the press with the story, calls poured in from the public, and the hospital retrieved the laptop within 24 hours. A third-party forensics expert confirmed that no patient information was accessed. Fortunately, the passwords to access the data were encrypted. Unfortunately, the nurse had stored the passwords on the computer.

In response to the incident, Beaumont has removed SSNs and information on inactive patients from the laptops. In addition, the hospital has educated staff about the importance of not leaving passwords on or near their computers, explains Chris Hengstebeck, director of security for Beaumont. The hospital also limits the amount of information stored on the computers and is considering implementing biometric security measures to access patient data on laptops.

(8) Aetna, Inc. in April reported that an employee's laptop computer containing personal information on 59,000 members was stolen from an employee's car. The insurer said it has notified affected members, who are employees of two Aetna customers. Aetna said it did not find evidence that there had been unauthorized use of the data, but offered to pay for credit monitoring services for affected members.

In response, Aetna now has a policy that all information on employees' laptops must be encrypted and has restricted the use of USB devices — interfaces between a computer and add-on devices. The insurer also conducted an audit of all computers to ensure they complied with the new rules, Aetna spokesperson Cynthia Michener says.

(9) Hospital chain HCA Inc. had 10 computers stolen that contained the names and SSNs of Medicare and Medicaid beneficiaries who were past-due on copayments and deductibles within the past decade. The computers contained information on

15,000 to 18,000 beneficiaries in Colorado, Kansas, Louisiana, Mississippi, Oklahoma, Oregon, Texas and Washington State, in addition to the names and SSNs of about 7,000 HCA employees and physicians. HCA set up a toll-free number for those involved, as well as a free credit report, one year of free credit monitoring and one year of identity-theft insurance.

(10) A front-desk coordinator at a Weston, Fla., clinic owned by the Cleveland Clinic between 2005 and 2006 allegedly sold patient information on 1,100 people to a cousin, who allegedly used the data to submit fraudulent Medicare claims. A federal grand jury in Miami indicted them in September on charges including violating HIPAA, aggravated identity theft, conspiracy and computer fraud.

Jeniece Poole, Privacy Officer
Office of the Vice President for Research
jpoole@email.arizona.edu

Institutional Biosafety Committee



Frequently Asked Questions....

Question: What does the Institutional Biosafety Committee actually do?

Answer: Establish, monitor and enforce policy, practices and procedures for all work involving recombinant DNA, pathogenic microorganisms, mammalian cell lines and gene therapy at UofA. The IBC shall ensure adopted policies, practices and procedures meet applicable regulatory standards and guidelines.

Review research conducted at or sponsored by UofA for compliance with adopted policies, regulations and guidelines. This review shall include an independent assessment of the containment required, and an assessment of the facilities, training and expertise of personnel involved in the research. The IBC shall ensure that the Principal Investigator is provided with the results of the review and determination of approval in a timely manner.

Set required containment for research projects. The IBC will use the biosafety levels (BL) recommended by the CDC and NIH as the usual standards for containment for work with a given biological agent. The IBC may, at its discretion, increase or reduce the BL depending on the circumstances presented by a specific project. Adopt emergency plans covering accidental spills and personal contamination resulting from recombinant DNA research.

Investigate any significant violation of policies, practices and procedures. The IBC will also investigate any significant research related accidents or illnesses. The IBC will determine and impose

appropriate disciplinary action if an investigation reveals significant violations. The IBC will report its findings and actions to the Office of the Vice President for Research, to granting agencies, and other regulatory agencies as required.

Develop design specifications and criteria for containment facilities.

Serve in an advisory capacity for research projects conducted at the Tucson Veteran Affairs Medical Center and the State Department of Agriculture.

Perform such other functions as may be delegated to the IBC by the Vice President for Research.

University of Arizona – Animal Care Quality Care for Research Animals



The accreditation site visit by The Association of Assessment and Accreditation of Laboratory Animal Care International will be sometime during the second half of February. All animal housing facilities, including farm animals, all laboratories where animals are kept for 12 hours or more and all rooms where surgery is performed will be included in the site visit. When a definite date is available, the animal care and use community will be informed.

In preparation for the site visit, floor repairs will be performed in the AHSC and CAF facilities in January 2007. The schedule and rooms affected are as follows:

Starting the week of January 8, 2007 there will be epoxy floor repair work performed in the following areas. In the two occupied Animals rooms listed, animals will be relocated; those researchers have already been notified. Otherwise, it is anticipated that there will very little impact to daily operations.

AHSC Animal Facility

- Room 129
- Room 132
- Room 139
- Room 1215
- Room 1258 (Ante room)
- Room 1263 (Dirty side cage wash)
- Room 1269
- Room 1270
- Room 1291 (Uni-sex restroom)
- Barrier Hallway (portion of the north end)

CAF Facility

- Rooms 107 and 109 (dirty lab space)
- Basement corridor near the elevators
- Lab 22 (second bay north)

For questions regarding the floor repair, please contact Timothy P. Ruddy: tpрудды@u.arizona.edu; for questions regarding the AAALAC site visit, please contact: Susan Wilson-Sanders: wilson-s@u.arizona.edu.

OPPORTUNITIES FOR ON-LINE ETHICS TRAINING

Ethical Guidelines for Gifts to Physicians from Industry *Free educational modules now available*

The American Medical Association's (AMA) national initiative on *The Communication of Ethical Guidelines for Gifts to Physicians from Industry* is now offering four free online modules for CME credit. Each educational module is available in two formats:

- Online self-study for CME credit; and
- Downloadable resources educators can use to build one-hour learning experiences.

These educational modules will help satisfy Accreditation Council for Graduate Medical Education (ACGME) requirements for education on professionalism and industry professional relationships as well as similar requirements by the American Board of Medical Specialties. For more information, please visit the following internet web site: <http://www.ama-assn.org/ama/pub/category/8405.html>.

On-Line Module or Short Course in "The Ethics of Research with Human Subjects" *The Least of My Brothers*

Funded by the [National Institutes of Health](#)
(Grant Number 1 T15 AI07601)

The Least of My Brothers is an on-line module (or short course) in the ethics of research with human subjects. For more details and course information, please access the following internet web address: <http://poynter.indiana.edu/sas/lb/>, or you may also contact Kara Lochridge at: (812) 856-4968, or klochrid@indiana.edu.

Human Subjects Research Online Training, "Protecting Human Subjects" From the Department of Health and Human Services

This educational training series is designed to provide you with: Historical background for behavioral and biomedical research; Ethical principles for human subject research; Case studies; Information on the role of an Institutional Review Board (IRB). If you are a HRSA staff member, researcher, grants and contracting official, grantee or someone

outside the agency (including institutional officials, reviewers, students, investigators, or IRB members), you will find information provided in this training valuable.

Module 1: "EVOLVING CONCERN: Protection for Human Subjects"

Module 2: "THE BELMONT REPORT: Basic Ethical Principles and Their Application"

Module 3: "BALANCING SOCIETY'S MANDATES: Criteria for Protocol Review"

If you are interested in additional resources, you may find the [OHRP Institutional Review Board Guidebook](#) helpful.

The 1993 Guidebook is designed to assist IRB members research, and institutional administrators in fulfilling their responsibilities for protecting the rights and welfare of human subjects as defined in the HHS regulations (45 CFR 46) entitled "Protection of Human Subjects," revised June 18, 1991.

Upcoming Conferences/Workshops

February 16, 2007

American Association for Laboratory Animal Science (AALAS) Symposium
Embassy Suites Hotel, Phoenix, AZ

[Submit your abstract form](#) for your paper or poster by November 15, 2006.

Address questions to: Grace Aranda at 621-3931, or email www.azaalas.org.

May 15-18, 2007

14th Annual Teaching Research Ethics Workshop
Indiana Memorial Union, Bloomington, IN

[Register](#) now for the Fourteenth Annual [Teaching Research Ethics Workshop](#).

University of Arizona Program in Research Integrity Education staff:

Alice C. Langen, Director, Research Compliance
Ruth K. Daniels, Program Coordinator and Editor
of the P.R.I.E. Newsletter rhk@u.arizona.edu
P.R.I.E. – Program phone number: (520) 626-6282

*The P.R.I.E. newsletter is researched
and compiled by Ruth Kurash Daniels.*

Words of Wisdom:

*"Be always at war with your vices,
at peace with your neighbors, and let
each new year find you a better man."*

~ Benjamin Franklin