

# Professional Ethics Report



ADVANCING SCIENCE. SERVING SOCIETY

Publication of the American Association for the Advancement of Science, Scientific Freedom, Responsibility & Law Program in collaboration with the Committee on Scientific Freedom & Responsibility

VOLUME XXI

NUMBER 1

WINTER 2008

## NANOTECHNOLOGY AS A MORAL ISSUE? RELIGION AND SCIENCE IN THE U.S.

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Nanotechnology is one of the fastest-growing areas of research, with federal funding in the U.S. having almost quadrupled since 2001. And the Wilson Center's Project on Emerging Nanotechnologies already tracks over 500 commercial applications that are currently on the market, including waterproof sunscreen, stain-resistant clothing, and high-performance sports equipment. When forming attitudes about nanotechnology, the U.S. public, at least for now, seems to focus mostly on these novel applications and their potential benefits and is not particularly interested in or concerned about the potential risks of the new technology [1].

Things have not changed much in the last few years. As part of two separate grants from the National Science Foundation (NSF), we have been tracking public attitudes and information on nanotechnology since 2004 with colleagues at Penn State, Cornell, and

Arizona State. Those tracking surveys showed that the U.S. public remains largely unaware of nanotechnology, and that levels of information – measured on a battery of true/false questions – stayed at consistently low levels.

Uninformed publics, of course, are a phenomenon that comes as no surprise to most social scientists. In fact, study after study in political science has shown that a majority of the U.S. electorate is similarly ignorant about candidate issue stances and the political process. And emerging technologies, such as nanotechnology and stem cell research, are inherently political issues. They get their own sections in federal budget proposals; they receive significant attention from regulators; and they have social and ethical implications that transcend the technical aspects of the science behind them.

What is surprising, however, is how little effort is currently spent on understanding the dynamics of opinion formation in a systematic, data-driven fashion. While the NSF has funded a significant number of studies on understanding the ethical, legal, and social implications (ELSI) surrounding nanotechnology, the latest budget for the National Nanotechnology Initiative (NNI) devotes less than four percent of all nano-related spending to projects with a major focus on ELSI issues.

This may be shortsighted for two reasons: noticeable gaps in some risk perceptions between the general public and leading nano scientists; and an increasing number of studies highlighting the importance of personal beliefs and values among members of the general public when they

form attitudes about nanotechnology [2];[3].

**A communication gap between scientists and the public.** The first phenomenon emerged when we compared attitudes from a sample of the leading U.S. nano scientists to a representative survey of the U.S. population, both collected with colleagues at the Center for Nanotechnology in Society at Arizona State University [4]. Not surprisingly, nano scientists were overall more optimistic about the potential of nanotechnology to bring about positive societal change, and less pessimistic about the potential risks of nanotechnology. In two areas, however, they expressed significantly higher concerns than the general public: environmental impacts, including pollution; and dangers to human health. These higher levels of concerns were somewhat surprising, given the generally more optimistic outlook of scientists for emerging technologies in the past. At the same time, however, the concerns among scientists simply mirror an emerging debate among corporations, interest groups, regulatory agencies, and academe about necessary steps for researching and regulating nano risks in these two areas.

**The emergence of moral concerns?** In the most recent iteration of our tracking surveys on public attitudes on nanotechnology, we also designed a battery of questions that paralleled the wording of questions in recent Eurobarometer surveys about public attitudes toward nanotechnology. This provided us with data from over 30 countries on attitudes toward nanotechnology and nano regulations [5].

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First comparisons showed many similarities between the U.S. and key players in Europe in terms of overall attitudes toward and awareness of nanotechnology. There was, however, one striking difference between Europe and the U.S. Respondents in the U.S. were significantly less likely to agree that “nanotechnology is morally acceptable” than respondents in most European countries. At first glance, of course, this finding seems somewhat puzzling. Why would consumers and citizens have moral qualms about a technology they know little about?

In order to make more sense of this finding, we first looked at the World Values Survey, an extremely rich data set with data from over 75 countries on religious views, values, media use, demographics and other variables. And the pattern was not surprising. On a ten-point scale, U.S. respondents scored between 8 and 9 on average when indicating how much guidance God provided in their daily lives. European respondents in Germany, France, and the U.K., in contrast, consistently scored below 5.

These differences are at least consistent with the idea that religiosity may play more of a role among the U.S. public than European audiences when it comes to nanotechnology. At the same time,

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The *Professional Ethics Report* is published quarterly by the Scientific Freedom, Responsibility and Law Program in collaboration with the Committee on Scientific Freedom and Responsibility.

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Back issues of *Professional Ethics Report* are on-line at <http://www.aaas.org/spp/sfrl/per/archives1.s.html>

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ISSN: 1045-8808

however, comparing aggregate level data from different data sources can suggest a potential explanation, but provides no conclusive evidence. Some of that individual-level data, however, can be found in a forthcoming study we conducted with colleagues at Wisconsin and Cornell [2]. In that study, we found a weak link between religiosity and attitudes toward nanotech and nano funding. And that most likely reflects a general reservation toward science among religious respondents. More importantly, however, our data showed that religiosity also serves as an important “filter” for certain publics when they make sense of nano.

This idea of “religious filters,” of course, is not just about a simple correlation between religiosity and attitudes toward science, which is important in its own right. But in this case, we are talking about a link between benefit perceptions and attitudes that varies depending on respondents' levels of religiosity. In other words, seeing the benefits of nanotechnology is consistently linked to more positive attitudes – at least among less religious respondents. For more religious respondents, in contrast, that effect is significantly weaker, and seeing the benefits of nano does not necessarily translate into support for the technology or future funding.

### The ethics of focusing on elite

**audiences.** Putting information out there, of course, continues to be an important goal for all science communication. But we also need to realize that different publics have different informational needs, react very differently to information, and -- most importantly -- are looking for answers to questions that often have very little to do with the scientific issues surrounding emerging technologies. As the data from our forthcoming articles show, fitting the moral implications of nano breakthroughs into their existing belief or value systems is much more important for some groups in society at the moment than understanding the science behind it.

**Letters to the Editor:** The editors welcome comments from our readers. We reserve the right to edit and abridge the letter as space permits. Please address all correspondence to the deputy editor.

Relying on research and strategic communication in order to reach uninvolved or hard-to-reach audiences and help them make sense of scientific information may raise some ethical concerns. Is it appropriate to use strategic communication in order to make scientific issues more relevant to a general public? And should we take advantage of communication tools that can also be used to spread what some would call “misinformation”?

The answer to the first question is a clear “yes.” In fact, the more successful communicators are at tailoring their message to specific audiences, the more effectively they can get the scientific side of things heard in public debate. Global warming in the U.S. is a good example. The U.N.'s Intergovernmental Panel on Climate Change (IPCC) was founded about two decades ago as an objective source of information about climate change. But “An Inconvenient Truth” and the subsequent Nobel Prize did more to raise awareness of the issue and force it on the political agenda than almost 20 years of science-based campaigning by the IPCC.

More importantly, the notion that we should not use all tools at our disposal in order to reach broad audiences is unethical in itself. Many traditional outreach efforts, such as town hall meetings, museum exhibits, or science sections of newspapers, often fail to reach minority populations and citizens of lower socioeconomic status. It is therefore critical to find ways to successfully engage and target these groups using what we know from systematic communication research. In fact, it would be unethical if we did not develop ways of reaching beyond traditional elite audiences.

[1] Scheufele, D. A., & Lewenstein, B. V. (2005). The public and nanotechnology: How citizens make sense of emerging technologies. *Journal of Nanoparticle Research*, 7(6), 659-667.  
[2] Brossard, D., Scheufele, D. A., Kim, E., & Lewenstein, B. V. (forthcoming). Religiosity as a perceptual filter: Examining processes of opinion

(Scheufele & Brossard continued on page 3)

(Scheufele & Brossard continued from page 2)  
formation about nanotechnology. *Public Understanding of Science*.

[3] Kahan, D. M., Slovic, P., Braman, D., Gastil, J., Cohen, G., & Kysar, D. (2008). Biased assimilation, polarization, and cultural credibility: An experimental study of nanotechnology risk perceptions: Project on Emerging Nanotechnologies Research Brief No. 3.

[4] Scheufele, D. A., Corley, E. A., Dunwoody, S., Shih, T.-j., Hillback, E., & Guston, D. H. (2007). Scientists worry about some risks more than the public. *Nature Nanotechnology*, 2(12), 732 - 734.

[5] Scheufele, D. A. (2008, February). Engaging religious audiences on nanotechnology. Paper presented at the Annual Meeting of the American Association for the Advancement of Science, Boston, MA.

## In the News

### ENSURING RESEARCH INTEGRITY: CONSIDERATIONS FOR THE SCIENTIFIC COMMUNITY

Several expert groups have drafted recommendations for upholding research integrity and preventing misconduct. "Integrity in Research: A Rationale for Community Action" and "Best Practices for Ensuring Scientific Integrity and Preventing Misconduct" are resources members of the scientific community can consult when confronting issues of research integrity. The EC Expert Group on Research Integrity drafted "Integrity in Research" as recommendations to the European Commission to "provide guidance on key issues" where the Commission might act or where the Commission might lead or work to promote wider discussion concerning research integrity throughout Europe. The Organisation for Economic Co-Operation and Development (OECD) Global Science Forum produced "Best Practices" to promote "practical and administrative dimensions of dealing with allegations of misconduct."

Both reports highlight various forms of misconduct, their consequences, causes, and contributing factors. While there is no "one-size-fits-all" solution, each report acts as a "check-list" for dealing

with, responding to, and investigating allegations. International and national communication, transparency, and oversight were given particular attention in both reports.

The two reports emphasize the harmful effects of research misconduct. "Patients are treated in or as a result of fraudulent clinical trials" (Integrity in Research), the taxpayers' who essentially provide the funding find their money to have been wasted, the reputation of research itself is tarnished, and public confidence atrophies.

In order to instill trust and ensure integrity, it is "always better to prevent bad behavior than to be forced to deal with its consequences" (OECD). Thus, the significance of preventive measures should be stressed, and those who succumb to "moral failure" must be made an example of and excluded from the scientific community (Integrity in Research).

Integrity in Research: A Rationale for Community Action -

[http://ec.europa.eu/research/science-society/document\\_library/pdf\\_06/integrity-in-research-ec-expert-group-final-report\\_en.pdf](http://ec.europa.eu/research/science-society/document_library/pdf_06/integrity-in-research-ec-expert-group-final-report_en.pdf)

Best Practices for Ensuring Scientific Integrity and Preventing Misconduct -

<http://www.oecd.org/dataoecd/37/17/40188303.pdf>

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### TIGHTER ROPES AROUND SCIENCE AND INDUSTRY TIES: LIMITING CONFLICTS OF INTEREST OR LIFESAVING THERAPIES?

Industries' interest in science has financed scientific research and created new technologies. Although their relationship has advanced science dramatically, and benefited society, conflict-of-interest (COI) "activists" argue the ties are "inherently corrupt," and are "harming the public and undermining public trust in science." They have proposed, "creating increasingly elaborate and restrictive conflict of interest rules," federal funding rather than pharmaceutical, excluding industry funded scientists from serving on committees what advise government regulatory agencies, i.e. FDA, EPA, and non-profit groups chartered by Congress.

But are these measures necessary? The American Council on Science and Health's (ACSH) takes on those activists in a new report, *Collaboration Between Science and Industry: Pro's and Con's of the Conflict-of-Interest Movement*. It examines the alleged tainted industry ties using scientific evidence, discusses the bias created by focusing on industry's financial conflicts of interest while ignoring other potential COI, explores current methods of protecting research integrity, and considers the "very real harm" that could result from restricting industry support of academic research.

Among the many attempts to discredit industry funded research, two are given particular attention in the report. At first glance, a 2003 review conducted by Yale University and a 2006 analysis of industry funded research proved positive for bias. But the ACSH report suggests otherwise. In order to provide the most comprehensive analysis, other components of the research must be weighed. FDA requires that new drugs be compared to an inactive placebo, thus, "studies that involve comparisons to placebo are more likely to have favorable results." Also, with limited resources, the most "promising therapies" take precedence, and positive results lead to later stages of research, resulting in a larger likelihood of success.

Patient safety and advisory panels are also under scrutiny regarding the impacts of conflict of interest. Industry funding might threaten the safety of clinical trial volunteers and patients receiving new therapies, and influence the voting outcome of government advisory panels and other scientific committees. However, statistics from Center Watch, a Boston-based publishing firm that is tracking more than 20 million clinical trial participants, have found that "safety for participants in trials in industry-sponsored drug trials is actually better than that for participants in trials at academic institutions funded by the government." With respect to advisory panels, Public Citizen found "no evidence that the industry ties of members of FDA committees... had changed the panel's decisions." Studies by the Center for Science in Public

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Interest examining ties in National Academies' committees "found no evidence of inappropriate behavior by such scientists."

The ACSH also takes aim at the activists for their bias towards industry, and their belief that COI only exist financially, and only between scientists and industry. Scientists with governmental ties "might conceivably be influenced by their funding." Putting funding aside, scientists are also susceptible to bias through their political views, personal connection to a drug's potential treatment, relevant religious views, age, ethnicity, gender, or sexual orientation. But critics of industry-funded research only identify scientists as "pro-industry" or "public health oriented," leaving no other possibilities.

Because scientists are vulnerable to industry bias, self-regulating mechanisms have found their place in the scientific community. Peer review and disclosure are intended to limit the possibility of "tainted" research. Peer review "ensures that research has undergone systematic scrutiny" where COI may be detected "through review of the science itself." Before publication, most scientific journals require authors to "disclose any financial interest, as well as the source of funding for the research." Another safeguard is open-access, where publications such as *Public Library of Science* enable anyone to see and evaluate all clinical trial results, limiting industry's potential deception.

The ACSH believe "the conflicts-of-interest crusade is merely a tool that they are using to attack an enterprise that they oppose on other grounds," and will prove more harmful than beneficial. Policies can "delay or prevent the development of new products and therapies," force scientists to seek research freedom and funding in other countries, hamper agencies from retaining "top research talent," slow the approval rate of new and effective drugs, and make it more difficult to seek the advice of qualified and experienced researchers and experts. [http://www.acsh.org/docLib/20080401\\_Collaboration.pdf](http://www.acsh.org/docLib/20080401_Collaboration.pdf)

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## In the Societies

### BIOSECURITY CODE OF CONDUCT

In August 2007, The Royal Netherlands Academy of Arts and Sciences published A Code of Conduct for Biosecurity. The Code was developed in response to the increased threat of biological weapons and their potential use in acts of bioterrorism. The principal objective of the code is to raise awareness of issues in biosecurity, primarily biological weapons and dual use of scientific research. Biological weapons are considered to be, "devices which disseminate disease-causing organisms or poisons to kill or harm humans, animals or plants." Dual use research occurs when organisms being studied for applications in medicine, biology or agriculture are exploited for use in biological weapons.

The Code directed at researchers, teachers and students is divided into six categories: raising awareness, research and publication policy, accountability and oversight, internal and external communication, accessibility, and shipment and transport.

According to the Code, scientists must be continually trained on the subject of biosecurity, and professional journals and associations must devote attention to this issue. Biosecurity should always be considered in the application and assessment process for research. The benefits of the investigations should be weighed against the risks when deciding whether or not to proceed with a project. The possibility of dual use of this new knowledge should be measured before the results are published.

Accountability and oversight are also critical. The Code stipulates that suspicious actions should be reported to the proper authorities. In order to encourage such reporting, a culture that protects whistleblowers is imperative. Another key to the safe use of studies is the secure internal and external communication of information. Security measures such as encryption must be used to protect the information contained in emails and on external memory devices. Appropriate protective steps

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should also be taken when using traditional means of communication such as phone or mail. The category of accessibility states that additional screening of staff and visitors should be done wherever there is the potential for dual use biological research. Finally, when shipping and transporting biological materials, supplementary measures should be considered and particular attention paid to transporters and recipients of dual use agents. Additional training should also be provided to security officials so they can recognize the potential risks of dual use agents.

To read A Code of Conduct for Biosecurity, visit: <http://www.knaw.nl/publicaties/pdf/20071092.pdf>

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### AMERICAN PSYCHOLOGICAL ASSOCIATION REPORT ON CONFLICTS OF INTEREST

In December 2007, the journal of the American Psychological Association (APA), *The American Psychologist*, published an article entitled "Corporate Funding and Conflicts of Interest - A Primer for Psychologists." The article is based on the executive summary of the findings of an APA task force established in 2003 to examine the implications of accepting funding from private entities, particularly pharmaceutical companies, for research and educational activities. The report also examines conflicts of interests that manifest themselves through advertising, marketing, and sponsorships provided by the industry, as well as consulting relationships. The APA is especially concerned about the influence of outside funding, as the number of psychologists with prescribing privileges will likely increase in the future. The report examined the experience of other medical research with outside funding, and established recommendations for the APA and its members. It has been well documented that the pharmaceutical industry has enormous

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political and scientific influence, and a major role in shaping academic research. As a result, the task force recommends that external funding for the organization be limited to nonessential functions, and that outside sponsor exhibits at annual meetings be closely regulated. The task force also advocates open access to raw data for research published in its journal, a practice not present in much of the research sponsored by pharmaceutical companies. Other recommendations include disclaimers for journal advertising, public registration of clinical trials, and full financial disclosure by investigators.

The report also details conflicts of interest present in continuing medical education (CME) funded by outside sources. The task force advises full disclosure, but also suggests that the organization explore not offering credit for CME funded by pharmaceutical companies, and developing a training program to inform members of ethical considerations in acceptance of outside funding.

Another concern the report examines is that of interaction with company sales and marketing efforts aimed at private practitioners. In recent years, promotional materials and distribution of samples and gifts have come under increased scrutiny. The task force suggests that members should refrain from displaying any promotional material or drug related advertising in their offices. Additionally, according to the report, members need to be cognizant of the potential bias that can be introduced through relationships with sales representatives, and should refrain from accepting any gifts at all.

The executive summary of the report can be found at:  
<http://www.apa.org/about/taskforce.html>

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## REVISION – DECLARATION OF HELSINKI

The World Medical Association (WMA) is revising the Declaration of Helsinki, a fundamental document for research ethics

throughout the world, for the first time in seven years. The purpose of this revision is not to reopen the statement, but to fill in gaps and broaden its scope. By May 2008, WMA aims to have a second draft ready for consideration and distribution, with a final goal of approving the new draft at the WMA's general assembly in October 2008 in Seoul, Korea.

Visit:

<http://www.wma.net/e/policy/b3.htm>.

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## THE SOCIETY FOR NEUROSCIENCE TAKES ACTION AGAINST ANIMAL ACTIVIST

The Society for Neuroscience (SfN) has published *Guidelines for Crisis Management: Responsible Use of Animals and Humans in Research*. The guidelines offer “appropriate proactive and reactive responses for SfN members whose research is attacked,” by radical animal activists.

The *Guidelines* outline preparation procedures that scientists and researchers can use as a safeguard if they find themselves a victim of an attack. The SfN recommends that its members start and regularly update a file containing specific information regarding their research and the animals involved. It instructs researchers to word their documents in lay English so they can be easily understood by the media and difficult to manipulate by activists. It advises researchers to familiarize themselves with their Institution's plan in responding to an attack, and to create such a plan if one does not exist. SfN also recommends that researchers “engage in advocacy projects,” offering the SfN *Guide to Public Advocacy* and Joint Steering Committee for Public Policy as sources of information on public advocacy.

Within the *Guidelines for Crisis Management*, SfN includes Guidelines for Animal Use, which advise researchers to undergo reviews by the Institutional Animal Care and Use Committee (IACUC), detailing which aspects deserve special attention. The *Guidelines* also include general policies and procedures based largely on PHS Policy

on Humane Care and Use of Laboratory Animals along with the National Academies of Science's *Guide for the Care and Use of Laboratory Animals*. In addition, the *Guidelines* provide regulatory documents for Canada, Mexico, German, the United Kingdom, the United States, and the European Union, as well as policies and documents for the use of humans in research.

In the event that grant applications and reports are requested under the Freedom of Information Act (FOIA), researchers should anticipate confrontation with their research. Researchers can rely on the *Guidelines* when activists question their research, and can receive support from the Society by contacting the Executive Director, and from networking support provided by other members who have been in similar situations. Scientists and researchers can consult the *Guidelines* for other support groups such as States United for Biomedical Research, government agencies, and national and international organizations.

For more information on the *Guidelines*, visit:  
[http://www.sfn.org/skins/main/pdf/gpa/Crisis\\_Management.pdf](http://www.sfn.org/skins/main/pdf/gpa/Crisis_Management.pdf)

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## ASHA GUIDELINES

The American Speech-Language-Hearing Association (ASHA) has published *Guidelines for the Responsible Conduct of Research: Ethics and the Publication Process*. The Guidelines were developed to assist researchers and students in moving through the research and publication process in an ethical manner. ASHA's Guidelines focus on areas where potential ethical problems are most likely to appear for two groups of people: authors, and editors, associate editors, and reviewers. Eleven topics relate to authors. These are protection of humans and animals, authorship, conflicts of interest, aspirational responsibilities of investigators, data management, data retention, data ownership, duplicate publication, manuscript preparation, copyright issues, and report of error.

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Editors, associate editors and reviewers are given guidance on ten areas: confidentiality, conflicts of interest, self-disqualification, reviewer objectivity and accountability, respect for intellectual property, publication decisions, journal autonomy, identification of misconduct, and reporting misconduct and adjudication.

The Guidelines are posted at <http://www.asha.org/docs/html/GL2007-00282.html>.

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## **PRACTICAL GUIDANCE FOR IMPLEMENTING COI POLICIES IN HUMAN SUBJECTS RESEARCH**

In February 2008, the Association of American Medical Colleges (AAMC) and the Association of American Universities (AAU) Advisory Committee on Financial Conflicts of Interest in Human Subjects Research issued their report, *Protecting Patients, Preserving Integrity, Advancing Health: Accelerating the Implementation of COI Policies in Human Subjects Research*. The Committee's Report addressed the identification, analysis, and management of conflicts of interest (COI) in human subjects research. It recognized two fundamental problems with current COI programs: the lack of consistency in institutional standards and the conflict between the pressure to participate in economic development and technology transfer and fundamental academic values. The report presents policy recommendations, educational guidance, and management strategies as teaching tools for the challenges raised by conflicts of interest.

Chapter one seeks "refinement" in three keys areas of the Associations' existing 2001 and 2002 guidance, along with three additional areas that "merit particular attention" concerning individual financial conflicts of interest. The Committee recommends: that a more clear and concise definition of "covered individual" be given, consistent with that of the National Institutes of Health (NIH); additional explanation of what "compelling circumstances" might mean; and that the reports and disclosures of COIs to institutions should be expanded

and clarified "to reduce the possibility of inadvertent failure to comply with reporting requirements." In addition, the Committee advises AAMC-AAU against variations in policies that lead to less rigorous standards in COI policies and practices. They recommend that institutions should adopt policies and standards for conflicts of interest in clinical practices. The Committee also urges the AAMC and AAU to educate the public, media, and government on how medical centers' policies are applied to protect the safety of human research subjects and clinical research integrity.

Chapter two addresses institutional financial conflicts of interest. The Committee encourages the Associations to develop and adopt COI policies for both the institution and officials, and to create a review process involving an internal committee or external review entity "within two years of issuance of this report." The report suggests a separation of administrative responsibilities and creating a COI committee to determine when to "accept and manage a conflict" rather than "require that it be eliminated." The Committee also proposes that the "rebuttable presumption" be used to govern decisions as to whether or not a human research project should be pursued with the presence of an institutional conflict of interest.

Chapter three offers practical advice for implementing and managing COI policies. It provides detailed steps for managing conflicts of interest, education, external professional activities and consulting, monitoring programs and analyzing cases involving potential COIs in clinical research. The report includes ten detailed case studies for institutes to use for guidance and reference, as well as a short-form template for analysis.

The full report is posted at: [https://services.aamc.org/Publications/showfile.cfm?file=version107.pdf&prd\\_id=220&prv\\_id=268&pdf\\_id=107](https://services.aamc.org/Publications/showfile.cfm?file=version107.pdf&prd_id=220&prv_id=268&pdf_id=107)

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## **Resources**

**UPDATED WEBSITE - UNESCO'S ETHICS EDUCATION PROGRAMME**

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has updated the website for its Ethics Education Programme (EPP). The EPP was initiated in 2004 as a result of the 32<sup>nd</sup> UNESCO General Conference (2003), which discerned a need to launch ethics education not limited to the area of bioethics, but in all scientific and professional education. The website can be used as a teaching tool, notifying the public of activities and teacher training courses around the world, as well as UNESCO publications, and other helpful texts. To view, visit:

[http://portal.unesco.org/shs/en/ev.php-URL\\_ID=6199&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/shs/en/ev.php-URL_ID=6199&URL_DO=DO_TOPIC&URL_SECTION=201.html).

## **ANSWERS TO FINANCIAL CONFLICT OF INTEREST QUESTIONS**

On March 21, 2008, the National Institutes of Health (NIH) posted a list of frequently asked questions regarding the financial conflict of interest (FCOI) regulation issued by the Public Health Service (PHS) and the Office of the Secretary of Health and Human Services (HHS). The regulation establishes standards and procedures to be followed when applying for research funding from PHS agencies, including the NIH. The questions and their responses are divided into three categories: General Questions, Institution-Specific Questions, and Investigator-Specific Question.

Institutions are required to comply with the regulation, inform the Investigator of the regulation and their own FCOI policy as well as the Investigator's reporting responsibilities. They must also have mechanisms to enforce the regulation, including ways to sanction investigators if abuse occurs.

Other questions addressed include to whom financial interests should be reported, what information the NIH can request, and where to find additional information. The questions and their answers can be found at: <http://grants.nih.gov/grants/policy/coifaq.htm>

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## NATIONAL POSTDOCTORAL ASSOCIATION TOOLKIT FOR RESPONSIBLE CONDUCT OF RESEARCH

The National Postdoctoral Association (NPA) has posted a responsible conduct of research (RCR) toolkit on its website to assist in the development of RCR programs for postdocs. NPA created this resource to address the needs of a community where nearly one third of postdocs have had no training in research ethics and another third's training has only been informal.

The NPA toolkit emphasizes six areas for RCR: data acquisition, management, sharing and ownership; mentor/trainee responsibilities; publication practices and responsible authorship; peer review; collaborative science; research misconduct; and communication and difficult conversations. The toolkit is divided into three main sections: designing an RCR program for postdocs; marketing RCR programs to postdocs; and selected references on the responsible conduct of research.

NPA describes some possible formats for an RCR program, including a workshop series or online courses. The toolkit presents suggestions on how to be successful in marketing an RCR program by creating attractive content, effectively publicizing the event, and having a convenient schedule and location. Finally, an annotated bibliography of RCR material is provided. The toolkit will continue to be updated with articles, and can be accessed at:

<http://www.nationalpostdoc.org/site/c.coJMIWOBIRH/b.2724509/>

## Announcements

**Award** – The Health Improvement Institute invites applications for the *Award for Excellence in Human Research Protection*. Closing date for the 2008 competition is September 29, 2008. Visit: <http://www.hii.org/500.htm>.

**Call for Papers** - The Sixth International Congress on Peer Review and Biomedical Publication will be held September 10-12, 2009 in Vancouver,

British Columbia, Canada. Aims are to improve the quality and credibility of biomedical peer review and publication, and help advance efficiency, effectiveness, and equitability of disseminating biomedical information throughout the world. Deadline for abstract submission is March 1, 2009. For more information, visit:

<http://jama.ama-assn.org/cgi/content/full/298/20/2420>.

**Case Study** - Center for Health Care Ethics at St. Louis University is seeking historical breaches (post-1900) in medical or research ethics for a case study. Submitted cases will be studied for personality and environmental factors that contribute to major ethical breaches in the areas of medical practice and research, i.e., Tuskegee syphilis trial. To nominate a case, email Becky Volpe at [rvolpe@slu.edu](mailto:rvolpe@slu.edu).

**Conference** – *The International Conference on Engineering Professional Ethics & Education* will take place on May 13-15, 2008 in Kuala Lumpur, Malaysia. Topics include: professionalism and ethics in engineering education; sustainability in engineering education and research; engineering and society; and engineering technology transfer. For more details, see: <http://eng.iiu.edu/my/icepee/>.

**Conference** – A Gordon Research Conference on *Governing Emerging Technologies* will be held on August 17-22, 2008 in Big Sky, MT. The conference seeks to expand the scope of STP theory, research, and practice to include broader aspects of governance. Applications must be submitted by July 27, 2008. For more details, visit: <http://www.grc.org/programs.aspx?year=2008&program=scipolicy>.

**Conference** - Indiana University's fifteenth *Annual Teaching Research Ethics Workshop* will convene at Indiana University in Bloomington, Indiana on May 13-16, 2008. Session topics will include an overview of ethical theory, trainee and authorship issues, conflicts of interest, conducting human subjects research, and responsible data management. Contact: Glenda Murray, Poynter Center, Indiana University, 618 East Third Street, Bloomington IN

47405-3602; Tel: (812) 855-0262; Fax (812) 855-3315; [glmurray@indiana.edu](mailto:glmurray@indiana.edu). Visit: <http://poynter.indiana.edu/tre>.

**Conference** – The Center for Genetic Research Ethics and Law at Case Western Reserve University will convene *Translating ELSI: Global Perspectives on the Ethical, Legal and Social Implications of Human Genome Research* on May 1-3 in Cleveland, Ohio to follow up on *A Decade of ELSI Research*, which was hosted by the NIH National Human Genome Research Institute in 2001. This conference will offer an international perspective across cultures and disciplines, and practical recommendations for scientists and policymakers. Visit: [www.cgreal.org/elsi](http://www.cgreal.org/elsi).

**Conference** – On May 8-9, 2008 the Cleveland Clinic will hold *Ethical Challenges in Surgical Innovation*. Aims of the conference include to: 1) educate participants about the moral dilemmas that often arise in the conduct of device development and other surgical innovations; 2) suggest potential solutions to these challenges, balancing the need for progress and creativity with the imperative of protecting patients from undue risk; and 3) create a forum for exchange of ideas between surgical innovators and bioethicists with expertise in surgical ethics. Visit: [http://www.clevelandclinicmeded.com/live/courses/2008/ethical\\_surgery08/overview.htm](http://www.clevelandclinicmeded.com/live/courses/2008/ethical_surgery08/overview.htm).

**Conference** – *Managing the Uncertainty of Nanotechnologies: Challenges to Law, Ethics, and Policy Making* will take place on May 22-23, 2008 at the University of Padua in Rovigo, Italy. Regulation, ethics and public policy, and the future impacts of nanotechnology will be discussed. Visit [www.ciga.unipd.it](http://www.ciga.unipd.it).

**Conference** – On April 14-16, 2008 the 1<sup>st</sup> Pan African Bioethics Congress, *Contribution in the Construction of an Ethical Scope and Integrated Bioethics Excellence in Africa within the Framework of the Millennium Development Goals*, will take place in Cotonou, Benin. Contact: Prof. Pierre Effa, Harmonie Pharmacy Building, Bonamoussadi Road at Bonamouang,

(Announcements continued on page 8)

(Announcements continued from page 6)

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Douala – Cameroon; Tel: 00 237 77 76  
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[effapierre@yahoo.fr](mailto:effapierre@yahoo.fr).

**Conference** – The Ninth World Congress of Bioethics, *The Challenge of Cross-Cultural Bioethics in the 21<sup>st</sup> Century*, will take place in Rijeka and Opatija, Croatia on September 3-8, 2008. Contact: Iva Sorta-Bilajac, MD, MSc, 9th World Congress of Bioethics Secretary General, Department of Social Sciences, University of Rijeka - School of Medicine, B. Branchetta 22, 51 000 Rijeka, Croatia; Tel: +385 51 651153; Cell: +385 91 4712837; Fax: +385 51 651219; [iva.sorta@medri.hr](mailto:iva.sorta@medri.hr). Visit: <http://www.bioethics2008rijeka.info/en/welcome>.

**Conference** - The Sixth International Conference on Ethics and Environmental Policies, *Environmental Ethics, Ethics and Climate Change. Scenarios for Justice and Sustainability*, will be held in Padova, Italy on October 23-26, 2008. The conference will discuss the relationship among science, ethics, and environment. Contact: The Lanza Foundation, Via Dante n.55 - 35139 PADOVA – ITALY, Tel: ++39/049.875.6788; [info@fondazioneLANZA.it](mailto:info@fondazioneLANZA.it). Visit: [www.fondazioneLANZA.it](http://www.fondazioneLANZA.it).

**Conference** – *Whose Nanotechnology? Perspectives of Researchers from Underrepresented Populations* will take place on April 22, 2008 at Arizona State University. Issues include Nanotechnology-related STEM fields and their influence from underrepresented perspectives, and the societal aspects of converging technologies, with specific concerns about underrepresented perspectives. Visit: <http://whosenanotechnology.asu.edu/conference>.

**Conference** - PRIM&R is convening *IRB Fundamentals: IRB 101sm* and *IRB*

**Support From the Following Societies is Gratefully Acknowledged:**

American Anthropological Association  
American Psychological Association  
American Society for Engineering Education

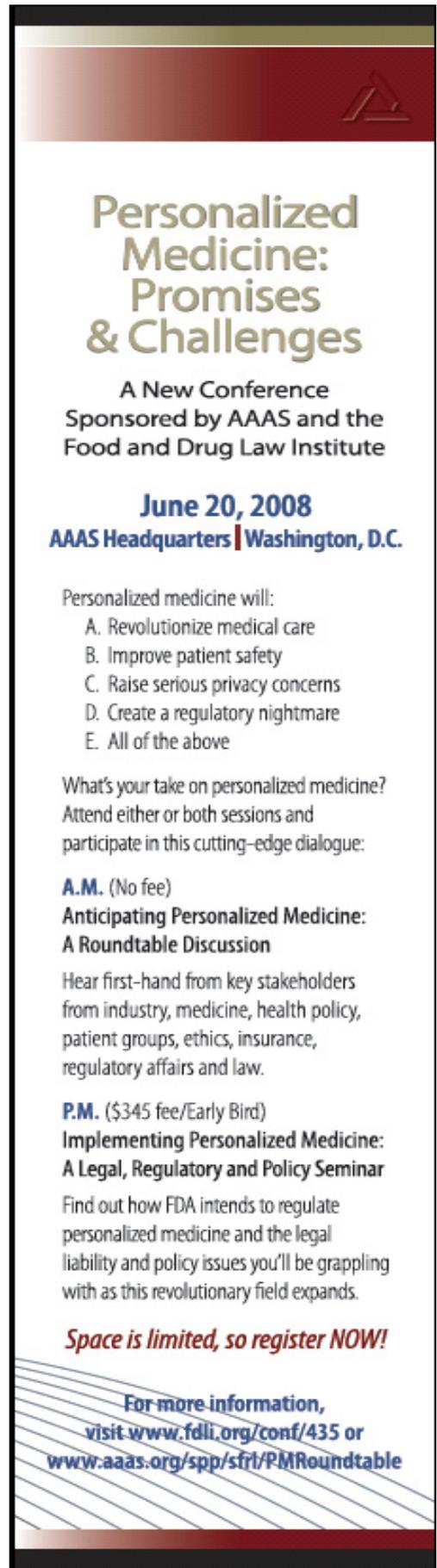
*Administrator 101* on May 5-7, 2008 in Durham, NC. The event is geared specifically to meet the educational needs of Institutional Review Board (IRB)/Human Research Protection Program (HRPP) members, administrators, and staff. Visit: <http://www.primr.org/Conferences.aspx?id=2927>.

**Conference** – The 14<sup>th</sup> Annual Trainer-of-Trainers Conference, *Teaching Survival Skills and Ethics*, will take place on June 8-13, 2008 in Snowmass, Colorado. This conference provides faculty and administrators with the background and materials needed to establish or improve instruction in the responsible conduct of research in a broad range of professional skills, including the ability to write research articles, give research seminars, obtain employment, secure funding, and teach and mentor. Visit: <http://www.survival.pitt.edu/events/trainers.asp>.

**Panel** – RxTrials Institute and DHHS ORI will host, *Ethics, Law, and Regulatory Affairs* on April 22, 2008 at the National Press Club, Washington DC from 8-10:30 am. Clinical research affecting the public, government and responsible research conduct will be discussed. See: [www.fdanews.com/rxti/conference/detail?eventId=2215](http://www.fdanews.com/rxti/conference/detail?eventId=2215).

**Grants** - The Greenwall Foundation has a new initiative called, *The Kornfeld Program in Bioethics and Patient Care*. Four to six grants will be awarded each year. Priority will be given to projects that aim for a practical (rather than theoretical) impact, with anticipated outcomes applicable at the patients' bedside. Junior investigators are encouraged to apply as well as researchers seeking support for pilot projects. For further details, go to: <http://www.greenwall.org/guideaffil.htm>.

**Tutorial** - On March 1, 2008, the NIH Office of Extramural Research (OER) on-line tutorial Protecting Human Research Participants replaced the NCI Human Participant Protections Education for Research Teams course. The OER tutorial is a free, web-based course that presents information about protections for human participants in research. Visit: <http://phrp.nihtraining.com>.



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For more information, visit [www.fdpi.org/conf/435](http://www.fdpi.org/conf/435) or [www.aaas.org/spp/sfr/PMRoundtable](http://www.aaas.org/spp/sfr/PMRoundtable)