

# Professional Ethics Report



ADVANCING SCIENCE. SERVING SOCIETY

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## WHOSE RESPONSIBILITY?

D. Prosnitz

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“High rates of technological growth, so long sought after as a means of bringing Utopia nearer, are coming to be seen as a potential threat to civilization and the quality of life.”<sup>1</sup> These words, written by British barrister Paul Sieghart in 1972, are especially meaningful in an era when the National Security Strategy of the United States<sup>2</sup> declared that “catastrophic technologies” are at the root of many of our most critical security problems. Similarly, U.S. appellate Judge Richard Posner, after dissecting the “... intertwining of catastrophe and technology” states: “...the risk of catastrophe is growing because science and technology are advancing at breakneck speed.”<sup>3</sup>

The concern over these technology-driven threats is great enough that the expected benefits of new technologies may be severely restricted by public pressure. A case in point is nanotechnology. “There is significant concern in industry that the projected economic growth of nanotechnology could be undermined by either real environmental and safety risks of nanotechnology or the public's perception that such risks exist... Some reports have indicated that these concerns are causing some companies to shy away from nanotechnology-related products.”<sup>4</sup> The risks are real—“nanotubes are toxic to all sorts of cells. You have to make sure

they stay put and don't wind up elsewhere in the body or the environment,”<sup>5</sup> and progress on mitigating these risks is perceived to be too slow.<sup>6</sup>

Some may discount the high consequence-low probability events that Posner posits, or point out that the dual-use nature of technology has always (and will always) enabled those who wish to cause mayhem to do so in increasingly unpleasant ways. Nevertheless, there are segments of our society who believe we are crossing a threshold of manageable harm to one of irreversible consequences; that the march of technology is changing our society in fundamental and objectionable ways. Many believe that the sheer scope of new technologies and global connectivity have created a potential for disaster on a scale not previously seen. “... [T]he information gained from life sciences research also could be used for destructive purposes that could threaten the health and safety of life on our planet.”<sup>7</sup> Geoengineering to redress the issue of global warming would, by design, be intended to alter our planet's environment.<sup>8</sup>

Paradoxically, many of the technical solutions proposed to deal with technology enabled terrorism are the very ones deemed to be a threat to our social values. Despite the demand to “connect the dots,” several advanced data mining programs—DARPA's former Total Information Awareness program (TIA) is only one example—have been cancelled due to real or perceived affronts to the privacy of individuals. Surveillance technologies and biometrics have come under similar assault. “The risk is not only that commercial and social activities are chilled, but that protected rights of expression, protest, association, and

political participation are affected as well.”<sup>9</sup>

How should the scientist or engineer respond to these challenges? Great technology that is never applied because it insults constitutionally guaranteed rights<sup>10</sup> is as much a failure as technology that never performs as promised. Does a scientist or engineer have a proactive professional responsibility to ensure that society extracts the maximum benefit from all that science and technology have to offer while mitigating the possibilities of its misuse?

There are persuasive arguments for the proposition that scientists not engage in public policy debates or speculate about the possibility of social harm emanating from research and development. These include:

- a) **Neutrality:** Research and development are always value neutral, while the designation “adverse consequence” is judgmental based on individual opinion, mutable societal norms, or even current events. Scientists must remain dispassionate. Any attempt to engage in discussions of adverse social effects will jeopardize the perceived neutrality of the technical community.
- b) **Uncertainty:** The totalities of adverse (or beneficial) effects are not knowable.
- c) **Responsibility & Competence:** The responsibility for preventing adverse use belongs with others—elected officials, enforcement agencies, the courts. Scientists are not trained to evaluate and judge societal impacts.
- d) **Can't make a difference:** Dual use is an age-old problem. Science has

survived in the past and will continue to do so. No action is required.

Although these arguments are compelling, there is good reason to expand the manner in which we evaluate our total responsibilities as scientists and engineers.

**Neutrality:** Science may be value neutral, but funding requires advocacy. Often research proposals must be associated with or targeted at some application. And applications have impacts. The National Science Foundation requires that all research proposals be evaluated not only on intellectual merit, but also on “broader impact criteria.” As illustrative of broader impact, the NSF lists advancing discovery and understanding, promoting teaching, training and learning, and explaining the benefits of the proposed activity to society. Not surprisingly, there is no requirement to discuss any negative impacts or propose research to mitigate adverse consequences.<sup>11</sup> Of course, it would be an extremely brave researcher who expounds on the negative impact of her research while seeking to have that research funded.

Having worked for 30 years on national security R&D, including directed energy systems and surveillance technologies, I am certainly familiar with the difficulties of discussing the pros and cons of the consequences of my work. Too often, technology developed for the military or

the intelligence community is de-facto considered harmful to society and less valuable (virtuous) than working on health care or global warming. These fundamental decisions are properly made by each of us individually; however, that does not mean that an investigator working on data fusion for the intelligence community should ignore the impacts on privacy of integrating massive databases, or someone working on germline therapy should ignore the social implications of his work, or a nuclear weapons designer should ignore proliferation concerns. To the contrary, elucidating the issues generally increases credibility. True neutrality requires that both the good and the bad be communicated to the sponsor and the public.

**Uncertainty:** The totality of the impacts of technology most certainly cannot be predicted. Basic research is so powerful simply because applications turn up in completely unexpected directions. Fundamentally interfering with this curiosity-driven process is not acceptable. Nevertheless, there are situations when the “broader impact” of the research or product has predictable, undesirable side effects—threats to societal norms such as privacy or human dignity. Advanced algorithms to permit facial recognition in large crowds may be detrimental to society because they reduce one’s privacy. Widely deployed radiation detectors can reveal an individual’s current medical treatments. LIDAR (Light Detection and Ranging) systems searching for biological or chemical weapons could interrogate the emissions from a house and expose intimate personal details such as, to paraphrase Supreme Court Justice Antonio Scalia, “my lady’s perfume.” The courts are unexpectedly adept at predicting future technology issues and threats to the social structure, as evidenced by Supreme Court Justice Louis Brandeis in 1928: “Advances in the psychic and related sciences may bring means of exploring unexpressed beliefs, thoughts and emotions. Can it be that the

constitution affords no protection against such invasions of individual security?”<sup>12</sup> Are today’s scientists any less prescient than Justice Brandeis was in imagining how modern neuroscience might be applied in the courtroom, criminal investigations, or airport check-in lines? We would hope not.

In many cases, what most concerns the public are amorphous and speculative risks, and what fuels that concern is lack of confidence that such risks have been adequately explored and addressed. Isn’t there a professional obligation to include as part of the design process—either planning a comprehensive research agenda (e.g., nano-technology or systems biology) or setting requirements for an advanced product (e.g., pathogen detectors) — a consideration of socially (albeit unquantifiable) adverse consequences, and include steps to identify, evaluate, and then either dismiss as insignificant or if necessary mitigate these potential consequences? Furthermore, by enunciating the issues, one stimulates the search for solutions. While social consequences may be hard to quantify, and may be considered by some to be exceedingly unlikely or *de minimis* in their impact, they are outcomes nonetheless that can be predicted and should be discussed. Scientists need not judge the social consequences; they need only be cognizant of them and provide technical expertise to help society arrive at the optimum balance of cost and benefit. Being aware of the context in which a new technology will be used, and preparing safeguards to enable that technology to be utilized in a manner consistent with societal norms, seems to be the best way to protect against the possibility that the fruits of the research won’t be used at all.

#### **Responsibility & Competence:**

Ensuring that technology does not harm society is clearly a shared responsibility. As Senator John Sununu stated, “If we want good public policy, then it has to be made by those who understand the issues.... We need to apply the problem-solving approach used by engineers to understand the realm of solutions, as well as the law of unintended consequences, in the public policy arena.”<sup>13</sup>

**Can’t make a difference:** Dual-use  
(Prosnitz continued on page 3)

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technology has always existed and will always exist. However, technology is now advancing so fast in comparison with the political process, and potential harm (especially from Weapons of Mass Destruction) is so great, that irreparable consequences may ensue before society can adapt and provide appropriate controls. In a crisis, without forethought that must include those with scientific knowledge, there is a risk that the urgency of the situation might lead to hasty, ill-considered and potentially harmful policy. Anticipation supported by the technical community is essential in today's world.

So what might be done?

- 1) Add to technical curricula courses intended to teach future scientists and engineers analytical techniques to evaluate (not judge) societal impacts of technology—not as an elective, but as core curricula. Many engineering departments already have this requirement. Training scientist and engineers to recognize ethics issues and seek advice of social scientists would enhance interdisciplinary communication. Ethics education is required of MDs and JDs, why not S&Es?
- 2) Incorporate technology impact studies into the research plans of major new initiatives. It is essential that these assessments be closely associated with the relevant research program. From the inception of the Human Genome Project, program managers devoted 3% to 5% of their budget to study the ethical, legal and social issues resulting from mapping the human genome. Incorporating these studies into the research plan ensures that policy and science advance together and inform each other. NSF's PORTIA (Privacy, Obligations and Rights in Technologies of Information Assessment) program is focusing on privacy enhancing technologies (mitigating the privacy threats of data mining) and policies. Similarly focused programs in nanotechnology and systems biology would be beneficial.
- 3) Incorporate into technology development projects a formal requirement to mitigate known negative societal impacts. Sensors can be designed and built with

information barriers to reduce Fourth Amendment concerns; facial recognition can include K-anonymity algorithms to enhance privacy.<sup>14</sup> Without such requirements, research efforts into mitigation measures will remain in the laboratory, and never be incorporated into operational systems. Building protection into requirements is simply good engineering practice. The DOD Inspector General's audit of TIA concluded that DOD's failure to consider the need to mitigate against the possibility of any governmental abuse of power during the early development of TIA led the Department to "risk spending funds to develop systems that may not be either deployable or used to their fullest potential without costly revision and retrofits."<sup>15</sup> The FBI's Carnivore internet surveillance program might have fared better with more robust auditing features.

- 4) Scientists and engineers should undertake, on their own initiative, efforts to reduce negative impacts of their work. The 1975 Asilomar Conference, which addressed safety issues related to the emerging technology of recombinant DNA, is a good model. The National Academy of Sciences Policy on Publication of Sensitive Material in Life Sciences<sup>16</sup> is another example of professionals regulating themselves. Should voluntary efforts not be enough, scientists and engineers should collaborate with those writing legislation and policy to craft regulations that are well founded and workable. Technologists can take poor options off the table and suggest workable regulations.

"The issue, of course, is ... freedom to pursue truth for its own sake. Beyond that point the scientist should have the same right, and obligation, as the rest of us to determine the ends to which knowledge is applied... The task of knowledge is not fulfilled with its gathering. Only when it has become the property of those who sing the songs, shape the manners, and write the laws of the commonwealth, is its charge completed."<sup>17</sup>

Whose responsibility is it to ensure that science and technology are used to benefit all of society? Ultimately, it's the

responsibility of all of us, scientists and engineers, legislators and the public at large. No segment can do it alone—conversely no segment should duck its responsibility.

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(Prosnitz continued on page 4)

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## \*Special Reports\*

### THE FIRST WORLD CONFERENCE ON RESEARCH INTEGRITY LISBON, PORTUGAL, 16-19 SEPTEMBER 2007<sup>1</sup>

Nicholas H. Steneck, PhD  
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The globalization of research has been in progress for several decades, aided most recently by new tools for communication and the Internet. Prior conferences and meetings have explored in depth ways to foster and benefit from these developments. None has looked specifically at the issues globalization raises for research integrity.

The World Conference on Research Integrity was the first global forum convened to provide researchers, research administrators, research sponsors, journal editors, representatives from professional societies, policymakers, and others an opportunity to discuss strategies for harmonizing research misconduct policies and fostering responsible conduct in research. The Conference was initiated and organized by the US Office of Research Integrity (ORI, Department of Health and Human Services) and the European Science Foundation (ESF), with additional support from other Conference partners.<sup>2</sup> A total of 275 participants from 47 countries attended the four-day event.

Research integrity is a broad umbrella concept that can include different interests and concerns. It can be discussed in relationship to individuals or institutions. It encompasses the focused problems of detecting and responding to the most egregious misbehaviors (research misconduct) as well the broad ideals set out in codes and best practices that all researchers should follow, even if many do not. There are, as well, national, institutional, and disciplinary differences that need to be addressed. With not too much jousting for room, all of these interests and others managed to find a place under the World Conference umbrella.

Fall 2007

For many, the issue of research integrity begins with the need for a serious response to research misconduct. For this aspect of the Conference, the Co-chairs (Nick Steneck representing ORI and Tony Mayer representing ESF) and the Planning Committee worked closely with the Organisation for Economic Co-Operation and Development (OECD) Global Science Forum (GSF), which was in the process of preparing a report on *Best Practices for Ensuring Scientific Integrity and Preventing Misconduct* for its member nations.<sup>3</sup> This report formed the basis of one of three working groups during the Conference. The GSF Report's endorsement of clear policies and serious efforts to promote integrity was for the most part well received by Conference delegates, many of whom are actively engaged developing policies and programs in their home countries.

Lapses in integrity are frequently discovered during peer review and publication. The second Conference working group, organized by the Committee on Publication Ethics (COPE),<sup>4</sup> looked at research integrity in this context. Papers and discussion explored the role editors can play in preventing misconduct and promoting integrity; how other stakeholders, such as funders and publishers, can help; the problems smaller journals face and the help they need to promote integrity. The goal of these sessions was to address the challenges faced in adopting and enforcing the broad codes that have already been developed by COPE, the World Association of Medical Editors, or the International Committee of Medical Journal Editors, the latter in the widely used *Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication*.<sup>5</sup>

Finally, there are the institutional and public faces of research integrity discussed by the third working group. Institutions can provide training on responsible research practices. Professional organizations develop guidance on best practices and set the ideals for individual fields of research. International organizations are well suited to develop global standards and to promote the harmonization of national policies. And all researchers need to be aware of the importance of integrity in

maintaining public support for research and of the ways in which public demands and pressure can influence integrity in research. The speakers who addressed these topics did not provide instant solutions. They did set the stage for the work that lies ahead.

Some of this work is already underway. The OECD GSF Report, which had its first public airing at the Conference, has been accepted and should be followed in a year by the report from a new working group chaired by Canada and the US. The ESF, with the support of the European Heads of Research Councils (EUROHORCS), will be developing a compilation of policies from its Member Organisations in Europe and this, together with the Conference report, should lead to the development of a Member Organisations Forum for research integrity. The European Commission is planning a number of initiatives following the publication of the report of its Expert Group on Research Integrity, including a call for research integrity related research proposals. Some of the educational challenges will be taken up at ORI's upcoming Conference of Responsible Conduct of Research (RCR) Education, Instruction and Training (April 2008).<sup>6</sup>

In their evaluations of the Conference, participants were asked whether a second World Conference should be held in two or three years. They overwhelmingly agreed that it should, and that the focus should be on addressing key problems, such as misconduct, conflict of interest, and a wide variety of questionable research practices.

Based on this feedback, the Conference Co-chairs are in the process of developing plans for additional follow-up activities, focusing on three crucial needs: 1) for better information about the behavior of researchers and the factors that influence their conduct; 2) to clarify, harmonize, and publicize standards for best practice and procedures for reporting improper conduct in research; and 3) to incorporate global standards for best practice and policies for responding to misbehavior into training and research environments.

Updates on these and other activities and plans for the Second World

(Special Reports continued on page 5)

Conference will be available on the World Conference web site.<sup>1</sup>

- [1] This summary is drawn from the final Conference Report, which is available at: <http://www.esf.org/activities/esf-conferences.html>.  
[2] Other co-sponsors and funders included: European Commission, Portuguese EU Presidency, Gulbenkian Foundation, Committee on Publication Ethics, European Molecular Biology Organization, UK Research Integrity Office, ICSU, and NATO.  
[3] <http://www.oecd.org/dataoecd/1/26/14116226.pdf>.  
[4] <http://www.publicationethics.org.uk/>.  
[5] <http://www.icmje.org/>.  
[6] <http://epi.wustl.edu/epi/rcr2008.htm>.

## STRANGE BEDFELLOWS

Deborah Runkle

*AAAS Scientific Freedom, Responsibility and Law Program*

On November 9-10, a first-of-its-kind meeting was held in Durham, N.C. (<http://www.law.duke.edu/aba-animalconference>). “Animals and Bioengineering: A Consideration of Law, Ethics and Science” was notable for the unlikely mix of attendees: lawyers and scientists with opposing points of view – animal rights proponents and supporters of the use of animals in research. Without doubt, the remarkable thing about the conference was that it took place at all and that a planning committee with highly divergent beliefs agreed on an agenda that would represent diverse points of view.

The standard of courtesy largely prevailing throughout was set by remarks from Joyce Tischler, co-founder of the Animal Legal Defense Fund (ALDF). Ms. Tischler noted that scientists and animal rights advocates have been “demonizing” each other for years, and it was time to acknowledge that scientists do care about animal well being and distress and animal rightists do care about human health and suffering.

Bioengineering attempts to endow animals with traits that cannot be achieved through standard breeding. Speakers described bioengineering methods and some of the accomplishments to date, the most famous being the “tuna pig,” a pig into which a gene for 3-omega fatty acid has been inserted. A blood clotting factor derived from goats’ milk is currently on the market and mastitis-resistant cows are in the development stage.

Beyond science, an important topic was patenting animals and whether it is an

ethical policy. In 1987, the U.S. Patent and Trademark Office (PTO) issued a notice that it considered animals patentable. Less than a year later, the PTO issued a patent to Harvard University on the OncoMouse, a mouse genetically engineered to develop cancer. This decision was unsuccessfully challenged, with the courts relying solely on procedural issues in reaching their decision.

The OncoMouse met a different fate in Canadian courts. Featured speaker Justice Michel Bastarache of the Supreme Court of Canada described how and why his court had rejected Harvard’s patent claims. The Canadian court based its decision on the definition of terms in the Canadian Patent Act, *manufacture* and *composition of matter*. The court concluded that *manufacture* does not imply a living creature and that *composition of matter* does not include higher life forms. “[T]he body of a mouse does not consist of ingredients or substances that have been combined or mixed together by a person. Moreover, ‘matter’ captures only one aspect of a higher life form, generally regarded as possessing qualities and characteristics that transcend the particular genetic material of which it is composed.”

Arguments over patenting, however, do not address the ethical implications of bioengineering itself. The scientists at the meeting implicitly endorsed the practice, citing the accomplishments of bioengineering to date and its promise for the future.

Dr. Bernard Rollin – professor of philosophy, biomedical science, and animal sciences at Colorado State University – provided a contrary point of view. Dr. Rollin does not believe that genetically engineering animals is *intrinsically* wrong. Rather he suggests we examine two questions – Does it create any social, ecological or disease dangers? and Does it harm the animal? – before coming to a conclusion.

Dr. Rollin raised several scenarios under which the first question could be answered *yes*. For example, bioengineered food may be harmful to humans, bioengineering may reduce the gene pool, and new pathogens may develop along with the new animals and be a danger to humans.

As for the second question, Dr. Rollin posits that it should not be permissible to alter animals in a way that could be inimical to their welfare and that might increase their suffering. Further, because we cannot be certain of the effects of a particular alteration, harm to the animal is always possible, rendering the technology unacceptable. Nowhere is this more true than in bioengineering for medical research, where the goal of the alteration is often to create a model of a human disease, thereby possibly increasing an animal’s suffering.

In fact, Dr. Rollin’s position would also prohibit the use of any kind of animal for biomedical or other research, in direct contrast to the view of luncheon speaker, Dr. Norka Ruiz Bravo, Deputy Director for Extramural Research at NIH. Dr. Ruiz Bravo spoke of a “national mandate” to improve people’s health and save lives. To do this, scientists have adopted an “integrative biology” strategy, using all levels of analysis from the subcellular to the living animal and to humans.

Further, Dr. Ruiz Bravo cited the ethical imperatives of the Nuremburg Code, a response to Nazi doctors who conducted experiments on “undesirable” people. Among the directives of the Code is that “animal experimentation should precede human experimentation.”

The conference provided an opportunity for two often-warring groups to listen to each other respectfully, but did it do more? Following the meeting, one animal rights advocate said, “There were times it seemed like we were at two separate conferences, one on biotechnology and one on the future of animal law...[but] I hope that participants from the science side left with as much a sense of accomplishment as I did. Understanding one another is a large step toward working together towards common goals.”

## In the News

### NATIONAL INSTITUTES OF HEALTH TO LAUNCH PILOT CONFLICT-OF-INTEREST COMPLIANCE PROGRAM

The National Institutes of Health (NIH)

(News continued on page 6)

announced the beginning of a pilot program that will assess institutional compliance with requirements of Federal Financial Conflict of Interest (FCOI) rules pertaining to NIH grants. The Targeted Site Review (TSR) program, an NIH initiative that focuses on FCOI compliance, released its observations on ten site studies that were recently completed. The TSR program used site-review teams to evaluate institutional compliance with FCOI directives. Information from interviews with officials, faculty, and investigators was used by the review teams to develop a full assessment of each institution's compliance. As a result of the site reviews, TSR identified several institutions that had developed sophisticated electronic systems to manage FCOI. Although no intentional evasion was reported, TSR found areas of concern regarding the practicality of FCOI procedures, and it made suggestions for improvement.

According to the NIH announcement of the Pilot Conflict-of-Interest Compliance Program, ten additional institutions will be selected to undergo a similar auditing of their FCOI policy and regulatory responsibility. Failure to meet FCOI expectations will be formally addressed and resolved with the NIH Division of Grants Compliance and Oversight. The results will be shared with the NIH research community as part of continuing educational efforts to improve institutional adherence to FCOI requirements.

More details can be found at: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-010.html>.

\*MO

## **ETHICAL CARBON REMOVAL?**

One can hardly peruse the latest news without reading about global warming. In addition to entreaties to change personal behavior, many eyes are turning to the scientific community to find ways to undo some of the damage already done. Iron fertilization is one such possible solution, seeking to stimulate the growth of plankton colonies, which in turn will absorb carbon and excrete it as waste as many as 500 meters underwater. Climos, a San Francisco-based company that focuses on removing carbon from the

atmosphere, recently proposed a code of conduct for experiments involving this controversial new technique.

There is a concern that the potential for profit to be made off of techniques such as iron fertilization will cause businesses to push forward with the technology without regard for its actual effectiveness or potential side effects. Iron fertilization is promising, but there is still a number of questions about its efficacy and side effects. Climos hopes that its proposal will stimulate discussion among relevant actors and lead to more commercial-academic partnerships on science. By demonstrating that there is discipline among the proponents of the technology, Climos hopes that objections to experimentation will be alleviated.

The code of conduct calls for anyone doing experimentation with iron fertilization to pledge to obtain the proper permits, to be open through the release of data, to conduct full environmental analyses, to avoid fragile ecosystems, and to enlist third-parties to confirm the amount of carbon uptake. Climos emphasizes that this is only a first draft, and it welcomes input from other scientists, organizations and businesses, many of which have already endorsed the idea.

The Climos press release can be found at: <http://www.climos.com/108release.html>

\*DC

## **U.N. STUDY CALLS FOR CONCRETE POLICIES ON HUMAN CLONING**

A U.N. study suggests that although international customary law has seemingly banned cloning, the absence of a specific and binding global consensus insufficiently addresses the issue. Barriers preventing consensus emanate from differences in ethical beliefs, which the study evaluates and responds to by offering future options for international regulations on cloning.

The study deduces the existence for customary law from past U.N. declarations and current state legislation on reproductive cloning.<sup>1</sup> Article 11 of the Universal Declaration on the Human Genome and Human Rights states, "Practices which are contrary to human dignity, such as reproductive cloning of

human beings, shall not be permitted." The Declaration was unanimously endorsed by the General Assembly in 1997. On March 8, 2005, while 34 countries were against and 37 countries abstained from the U.N Declaration on Human Cloning (A/RES/59/280), 84 nations supported the Declaration's prohibition on cloning that demeans "human dignity and the protection of life." Although cloning techniques used for therapeutic purposes<sup>2</sup> are still highly debated, as of November 2007, 50 countries, including the United Kingdom, Canada, France, Germany, Italy, Japan, Korea, Singapore, Sweden, Switzerland, and several states in the U.S., have laws that ban reproductive cloning. Once custom is recognized, the study states that customary law has the power to influence the whole of the international community, rather than mere parties to a treaty. Customary law on reproductive cloning could subsequently pose as an obstacle for allowing other forms of cloning, including research cloning, on an international level. However, the study acknowledges that custom cannot enforce actual state practice.

To make up for the weaknesses of customary international law, the study supports binding international rules. Actions to establish them have been immobilized due to divisive ethical debates over cloning's impact on human dignity and ambiguity in existing regulation. For example, the study reports that the Universal Declaration on the Human Genome and Human Rights "does not specifically refer to research cloning, which will be read by some as an indication that the international community did not consider to be contrary to human dignity. Conversely some will argue that the ban extends to all cloning which brings about life...."

In light of such difficulties, the U.N. study proposes the following regulatory options: 1) A complete ban on all cloning research; 2) A ban on reproductive cloning; 3) A ban on reproductive cloning, but full approval of research cloning; 4) A ban on reproductive cloning, but approval of research cloning on a time-restricted basis; or 5) A moratorium on all cloning research. The study also proposes the following governance options: 1) UNESCO's

(News continued on page 7)

International Bioethics Committee should look at both reproductive and research cloning in the context of the U.N Declaration on Human Cloning and Universal Declaration on Bioethics and Human Rights; 2) General Assembly Sixth committee should evaluate customary international law on cloning; and 3) International discussion, debate, and dissemination of cloning issues.

To view the U.N. report, visit:

[http://www.ias.unu.edu/sub\\_page.aspx?catid=35&ddlID=581](http://www.ias.unu.edu/sub_page.aspx?catid=35&ddlID=581)

[1] Reproductive cloning is defined by the study as the "use of cloning technology to produce one or more individuals genetically identical...to another individual."

[2] Therapeutic/research cloning is defined as, "Medical and scientific applications of cloning technology, which do not result in the production of genetically identical fetuses or babies."

\*JS

## In the Societies

### ANTHROPOLOGY ASSOCIATION TAKES ON THE MILITARY

In October 2007, the American Anthropological Association (AAA) issued a formal denouncement of the Human Terrain System (HTS), a military program that enlists anthropologists to advise the military on populations in Iraq and Afghanistan. While this program was initially inspired by anthropologist Montgomery McFate, who believed it would help minimize loss of life, AAA worries that it will tarnish the reputation of the field and hinder anthropologists' ability to work in the region.

The primary concern of the AAA was that members who participate in HTS will be unable to respect their professional commitment to not harm the people they study. The program calls for anthropologists and other social scientists to provide information to military units in Iraq and Afghanistan, and there are fears that this information will be used to target specific populations. Other concerns are that the participation of some anthropologists in the program will make the work of others more difficult if they have to convince their subjects that they are not working for the American military.

This issue is not the only action taken by anthropologists related to the military. A pledge of nonparticipation has been

circulating for some time by the Network of Concerned Anthropologists, which presented this pledge at the AAA Annual Meeting in late November. Also on the agenda for November's meeting was a report from the Commission on the Engagement of Anthropology with Security and Intelligence Communities, which recommended a revision of the society's Code of Ethics to address more explicitly the issues posed by HTS and similar partnerships. Notably, the Commission did not recommend non-engagement with the program, instead choosing to focus on AAA's responsibility to provide information, counseling and other resources to members considering employment with intelligence and security organizations.

The Commission Report can be found at: [http://www.aaanet.org/pdf/Final\\_Report.pdf](http://www.aaanet.org/pdf/Final_Report.pdf).

\*DC

## Resources

### OVER-REDACTION: COALITION CALLS FOR GOVERNMENT OPENNESS

Government Secrecy: Decisions Without Democracy  
<http://www.openthegovernment.org/otg/govts/ecrecy.pdf>

OpenTheGovernment.org recently published "Government Secrecy: Decisions Without Democracy." This report is an update from a 1987 paper, and focuses on threats to openness posed by "excessive classification, brazen assertions of 'executive privilege' and 'state secrets,' new control markings to restrict 'sensitive but unclassified' information, and new limits on Freedom of Information Act requests."

OpenTheGovernment.org lists over sixty other organizations as members. The mission of the group, reflected in the report, is to advocate for increased transparency in government in order to promote greater accountability, greater access to government, and ultimately, greater trust and confidence in American democracy. The report makes use of the texts of various U.S. laws, executive orders, government studies, and testimony from government officials in order to paint a picture of current

problems with openness, and indirectly, with democracy, in our society.

The report cites a number of benefits of openness in government. Among them are: limits on misinformation; prevention of corruption, mismanagement and abuses; promotion of government efficiency, scientific innovation and development; and the ability for individuals to protect themselves and government to avoid unnecessary regulations. While the report does not acknowledge any downsides to openness, it recognizes that protection of national security and personal information are two legitimate reasons for keeping certain information classified.

The report tracks a number of trends in the level of secrecy with which the federal government conducts business, and identifies a considerable increase in the classification of documents under the current administration, citing also President Bush's Executive Order reversing President Clinton's directive that said "information could not be reclassified if it had been declassified and released to the public." Moreover, the report quotes various government officials who estimate that "between 10 and 90 percent of all documents are over-classified," with most of those quoted putting the number at 50 percent or higher. A 2001 memo by Attorney General Ashcroft also reset the default response to Freedom of Information inquiries at withholding information rather than releasing it.

Procedures for classification, such as who may do it, for what reasons, and for how long, were laid out by President Clinton in a 1995 Executive Order. There are about 4,000 people authorized to classify information, and they may do it for reasons related to national security. Basic scientific knowledge unrelated to national security may not be classified, nor may classification occur in order to "conceal violations of the law, inefficiency, or administrative error, prevent embarrassment to a person, organization or agency, retain competition, or prevent or delay the release of information that does not require protection in the interest of national security information." Many elements of this order are often ignored, however, as is evidenced by the initial

(Resources continued on page 8)

classification of the report on abuses at Abu Ghraib prison.

The report argues that the often contested claim of executive privilege also serves to undermine efforts to move toward greater government transparency. It contends that the current Bush administration has been particularly heavy-handed with its use of the executive privilege claim. Murkier still is the White House and other executive agencies' use of the "sensitive" categorization, which is a designation often lacking legal authority, is inconsistent from agency to agency, and carries with it no statutory or even uniform procedures for how it is handled.

Finally, there are often additional bureaucratic obstacles for citizens wishing to access certain information and for federal employees who want to alert the public to questionable activities. Under the Freedom of Information Act, the government must respond to the request within a twenty-day period. However, they need only make the information available "promptly," which, as it turns out, can take as long as two decades. Meanwhile, federal employees who wish to report wrong-doing are, the report contends, inadequately protected by federal whistleblower protection laws, and may find themselves reassigned, blacklisted, or the subject of a retaliatory investigation.

The report also discusses new opportunities for public access and participation in the digital age, although, not surprisingly, gives the government unsatisfactory marks on implementation of new technology and compliance with laws mandating increased openness. Information technology allows for greater participation in government, and yet government websites are often woefully lacking, with information appearing and then disappearing and access to raw information for analysis limited. The report ends by imploring readers to get more involved in promoting openness and accountability in government, which starts with each individual paying more

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

American Anthropological Association  
American Psychological Association  
American Society for Engineering Education

attention to the world around him.

## Announcements

**Award** – The Neuroethics Society, in collaboration with the Penn Bioethics Journal (PBJ), invites submissions for the first annual Neuroethics Society Undergraduate Writing Prize. Winners will receive cash prizes and their papers will be published in PBJ. Deadline is January 18, 2008. Visit: [www.bioethicsjournal.com](http://www.bioethicsjournal.com).

**Call for Papers** – The University of Rouen, France will host *Withstanding Influence: Academic Independence and its Discontents* in Rouen on March 27-28, 2008. Proposals for the conference are due January 14, 2008. This international conference focuses on the meaning of academic freedom and the power of knowledge in today's society. Contact Gyöngyvér Demény [gyongyver.demeny@univ-rouen.fr](mailto:gyongyver.demeny@univ-rouen.fr) at the Conference Secretariat, or visit: <http://calenda.revues.org/nouvelle9566.html>.

**Call for Papers** – Papers are sought for the 10<sup>th</sup> *ETHICOMP International Conference on the Social and Ethical Impacts of Information and Communication Technology (ICT)* at the University of Pavia, Mantua, Italy on September 24-26, 2008. Abstracts should be sent to [ccsr@dmu.ac.uk](mailto:ccsr@dmu.ac.uk) by February 22, 2008. Visit: <http://www.csr.cse.dmu.ac.uk/conferences/ethicomp/ethicomp2008/>.

**Conference** - The Center for Applied and Professional Ethics at the University of Tennessee is hosting *Energy and Responsibility* in Knoxville, April 10 – 12, 2008. Visit: [http://isse.utk.edu/energy\\_and\\_responsibility/index.html](http://isse.utk.edu/energy_and_responsibility/index.html).

**Fellowship** - The Stockdale Center for Ethical Leadership and the Carnegie Council on Ethics and International Affairs invites applications for its annual Resident Fellowship in Ethics and Leadership. The fellowship seeks to strengthen public understanding of the ethics of war and peace, ethics and the military profession, and the relationship of ethics and leadership development. Deadline for applications is January 15, 2008. Send to Dr. George R. Lucas, Jr., 112 Cooper Road, Annapolis, MD

21402-5022; FAX 410-293-6081; [grlucas@usna.edu](mailto:grlucas@usna.edu).

**Conference** – The *Fifth International Conference of the Australian Institute of Computer Ethics* will take place on February 11, 2008 at the School of Information Systems, Deakin University in Melbourne Australia. Topics may include: privacy and monitoring, security and computer misuse, developing information systems, and computer ethics in developing countries. Visit: <http://www.deakin.edu.au/~mwarren/aice2008/>.

**Conference** – PRIM&R is convening *IRB Fundamentals: IRB 101<sup>sm</sup> and IRB Administrator 101* on February 4-6, 2008 in Las Vegas, NV. 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>.

**Grants** – The National Human Genome Research Institute and the National Institutes of Health are offering the ELSI Regular Research Grant (R01) and Small Research Grant (R03) in support of studies that focus on the ethical, legal and social implications of human genome research. For more on R01, visit: <http://grants.nih.gov/grants/guide/pa-files/PA-08-012.html>. For more on R03, see <http://grants.nih.gov/grants/guide/pa-files/PA-08-013.html>. Contact: Joy Boyer, Jean McEwen, or Elizabeth Thomson; ELSI Research Program, National Human Genome Research Institute, National Institutes of Health; 301-402-4997; FAX 301-402-1950; [jb40m@nih.gov](mailto:jb40m@nih.gov).

**Seminar** – Registration forms are being accepted for the 8<sup>th</sup> *Scientists and Subjects Online Seminar*. This is an Internet-based seminar designed for researchers and administrators concerned with human subjects research. Sessions offered from February 25-May 4, 2008. Complete the registration form at <http://poynter.indiana.edu/sas/sasos.php> by February 8, 2008, and submit the registration fee by February 15, 2008. See: <http://poynter.indiana.edu/sas/sasos.php>. Contact: Kenneth D. Pimple; (812) 856-4986; FAX 855-3315; [pimple@indiana.edu](mailto:pimple@indiana.edu).