

# Professional Ethics Report



ADVANCING SCIENCE. SERVING SOCIETY

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## TEACHING RESEARCH ETHICS AT IMPERIAL COLLEGE LONDON

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In March 2007, Sir David King, then Chief Scientific Advisor to the British Government, addressed an audience of graduate students and staff at Imperial College London, the UK's premier science university. His task was to bring to the attention of academics and students an ethical code he hoped would be embraced by scientists [1]. *Rigour, Respect, Responsibility: a Universal Ethical Code for Scientists* attempts to pin down the norms of scientific conduct, and encourages reflection on how best they can be maintained. As might be expected from the title (it is a "universal" code), Sir David's commandments are grand in scope. Yet they provoke careful thinking about two precise and well-defined debates. The first of those debates concerns the idea that an ethical code for scientists must reach far beyond worries about plagiarism, fabrication and falsification, and must touch on relations between science and society. The second debate is the zone of moral philosophy which examines the relationship between personal and institutional ethical responsibility.

The larger part of Sir David's audience was students. Indeed, they were my students. For one of my duties at Imperial College is to teach research ethics to life science PhD students. My course *Science Research and Integrity* is an element in a range of workshops that are compulsory to early-years PhD students. Imperial College is probably unusual not only in

making resources available for research ethics teaching, but in making attendance at these courses part of the requirement for successful transition from MPhil to full PhD status.

Watching Sir David King's intelligent and skilled presentation, I was struck by the contrast between this shrewd and successful scientific elder and the young neophytes in the audience. How would my students see his call for ethical awareness? As a teacher, I wondered whether they would see his code as very remote theorising about rather exotic eventualities. Or would they see Sir David as raising matters of urgent concern to their actual lives now?

Straightaway afterwards, I discussed the lecture with one of Imperial's distinguished biology professors. "That was good," he said. "Sir David is right. In the end, ethical responsibility comes down to the moral character of the individual." And, in a way, he *is* right. Is it not a commonplace that different people working in the same environment may develop very dissimilar ethical attitudes? But it is common, too, in the research ethics literature to find recognition that we cannot ignore the culture of the research environment if we are to nurture the moral probity of our work. Nicholas Steneck and Ruth Ellen Bulger have put the matter concisely: "The character of individuals depends not only on their character and training but also on the environment in which they work" [2].

I believe that teaching research ethics to young scientists must involve sensitive and respectful discussion of the local research culture, as well as a treatment of the universal rules concerning scientific conduct. In instructing young scientists

about misconduct, certainly you have the option of exploring research ethics as though you are teaching grammar, emphasising the extreme folly of plagiarism, falsification and fabrication. I call this "reflecting on exotica." There is value to these reflections, but frankly they remain remote to the practical experience of almost all postgraduates. There is another option, which is to widen the discussion by mentioning forces and perils more likely to be familiar to our students – guest authorship, the management of data, being too quick to publish, the insecurities of funding. I call this "reflecting on the mundane."

The truth is that if you have a three hour workshop for PhD students already aware that the clock is ticking on their project, discussing fabrication at length is no more useful than having an exhaustive discussion of Socrates and Plato. In research ethics education, the essence of the successful workshop lies in whether the students see the teaching material as relevant to their own lives and professional aspirations. Here, reflection on familiar daily patterns is better than warnings about exotic and extreme behavior.

I am arguing that successful research ethics teaching does more than emphasise the moral nightmare of fabrication, falsifying or plagiarism. Teachers should make the point about what in the USA is called "FFP," and then move on to discussions far more relevant to our students. We should be asking them: "What took you into science? What kind of research culture would you find most congenial?" As teachers of research ethics, we are succeeding when the bulk

of the classroom talk is coming from the students.

What should be the organising principle of this classroom talk? Some assistance here comes from the great philosopher Immanuel Kant, who invited us to organise our ethical decisions around a kind of thought experiment. He asked: "if everyone behaved like this, would the world be a congenial place?" In so far as Kant thought there could be a science of ethics, this "Categorical Imperative" would be its guiding rule. Transposed to modern science, teachers can ask their students what kind of research culture they want to belong to, and what their contribution to that culture will be.

Research ethics taught this way is forward-looking and student-centred. Instead of bringing to bear on the students a snow storm of codes and case studies, the more fruitful option is to ask them to examine their own ambitions and experiences and work out from there what kind of ethics they consider important. A workshop based on these principles relies on discussion among students about their projects, not slide shows about malpractice in laboratories in other universities, countries, or eras.

You might ask, "But have postgraduates early in their careers anything useful to say about the murky world of scientific misconduct?" First year PhD students at

Imperial College are rarely world-weary or cynical, and they have not experienced much of research life. It might be wondered whether anything remotely fitting "the research ethics agenda" is ever brought up in discussion. This, I suggest, is to misunderstand what I mean by best practice in ethics pedagogy. The point is not so much to catalogue and condemn the wrongs of science, but more to establish the idea that reflection on your working practices is a fundamental aspect of the skilled professional. And you can't start too soon.

I will admit this kind of teaching takes some nerve. Sometimes slide shows and hand-outs hamper discussion, and slow reflection. As you will be discussing the students' own lives, today, I recommend a simple and direct approach. For a warm up exercise I put the students into pairs, and ask each pair to introduce themselves to each other, with a quick discussion of their respective PhD projects. Then the pair interviews each other on "one good thing, and one bad thing that has happened to you in science." After 15 minutes they report back, on each other's behalf, the fruits of their discussion. With 20 students in a classroom, a lively 45 minutes is guaranteed. By the end, the students want to know more, and the process of reflection has started.

For the teacher, there is something critically interesting about research ethics education. Like science education itself, there is an easily available but onerous curriculum of facts: the codes, rules and recommendations of the research ethics community. Educationally, the more engaging aspect of research ethics is that successful instruction requires an overtly student-centred and discussive approach. For most science students, this kind of classroom teaching is remarkable and refreshing.

We are lucky at Imperial College in benefiting from the enlightening effect of our two Graduate Schools tasked with supervising PhD and Masters study.

These are the Graduate School for Life Sciences and Medicine (GSLSM) and the Graduate School for Engineering and Physical Science (GSEPS) [3].

Traditionally in the UK, a PhD student, rather like an apprentice, is beholden to the supervisor, who in all fundamentals manages the guidance and instruction. This, of course, contrasts with the situation in the USA, where doctoral study is far more structured. Yet here in the UK, too, the need for structure, for some professionally supportive environment that extends outside the immediate laboratory, has now been recognised. It is the joint task of the Graduate Schools and the student supervisor to develop together a "graduate culture" that both secures the qualification and provides a protective corral.

To conclude, recognising the small conflicts students face is the first task of ethics education. An excellent argument for this position comes from the novelist Joseph Conrad's late masterpiece *The Shadow Line*. Conrad is relevant here because of his obsession with the morally-aware professional who must wrestle it out in a tough environment. *The Shadow Line* concerns a young mariner whose ambivalence about his profession led him to quit, but who had nevertheless a secure reputation. In the book, this character, while waiting for a berth home to England, is approached with an astonishing offer – would he take command of a ship?

It would be his first captaincy. Suddenly, all the ambivalence is banished, and the young mariner takes on the ship. The point of the story, as Conrad tells it, is that the subsequent nautical adventure reveals an undreamt of expertise in the mariner – and the story seems to be that it is those who reflect on their profession, and sometimes feel doubts about their progress, who will in the end show the sharpest and the most imaginative skills.

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[1] [http://www.dius.gov.uk/publications/science\\_society/file41318.pdf](http://www.dius.gov.uk/publications/science_society/file41318.pdf).

[2] Kalichman M.W. (2007). Responding to challenges in educating for the

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responsible conduct of research. *Academic Medicine* 82 (9) p871.

[3]<http://www3.imperial.ac.uk/graduateschools>

## In the News

### REQUESTING COMMENTS ON THE GENETIC INFORMATION NONDISCRIMINATION ACT OF 2008

The Internal Revenue Service (IRS) of the Department of the Treasury, the Employee Benefits Security Administration of the Department of Labor, and the Centers for Medicare & Medicaid Services of the Department of Health and Human Services (HHS) issued a request for information (period ending December 9, 2008) in regards to Sections 101-104 of the Genetic Information Nondiscrimination Act of 2008 (GINA).

GINA was passed in order to prohibit discrimination on the basis of genetic information within health coverage plans. The Sections under consideration here, 101 – 104, address employment-based health coverage, individual market health insurance, and Medicare supplemental coverage. In these sections, GINA prohibits health plans from using genetic information to alter rates, or to impose preexisting condition exclusions. Additionally, GINA prohibits a health plan from requiring that an individual undergo a genetic test.

The Departments are seeking comments addressing the implementation of this act. They are asking which policies, procedures, or practices will be impacted by GINA, and what the costs and benefits of these impacts are. They are especially interested to know if there are any unique impacts for small employers or issuers. Additionally, they pose 9 questions in order to assist them in developing regulations dealing with sections 101-104 of GINA.

The request for information is posted at: <http://www.dol.gov/federalregister/HtmlDisplay.aspx?DocId=21604&AgencyId=8&DocumentType=1>

To read GINA: <http://frwebgate.access.gpo.gov/cgi->

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[bin/getdoc.cgi?dbname=110\\_cong\\_public\\_laws&docid=f:publ233.110](http://bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ233.110)

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### NIH HANDLING OF ETHICAL VIOLATIONS INCONSISTENT

The Office of the Inspector General (OIG) within the Department of Health and Human Services (HHS) released a new report in October 2008, “National Institutes of Health’s Handling of Allegations Concerning Conflict of Interest and Ethics Violations.”

The objectives of this study were to determine the types of allegations related to conflicts of interest and ethics violations within the National Institutes of Health (NIH), determine the final resolution of those claims, and understand how the different Institutes and offices within NIH handle the allegations.

The OIG was concerned with the consistency of how allegations are handled within the NIH ethics program, since it is a complex collaboration of offices. The NIH Office of the Director maintains an Ethics Office, which provides guidance to the ethics offices within each of the 27 Institutes and Centers of NIH. Additionally, the HHS Office of the General Counsel (OGC) has its own ethics division at NIH, to provide advice and interpret the HHS ethics regulations. The NIH offices are to report criminal behaviors to the HHS Office of Inspector General, and noncriminal misconduct to NIH’s Office of Management Assessment (OMA).

The study found that the most common reason an allegation was filed (52% of allegations) was when employees failed to complete required ethics training. The second most common reason for a filed report (34% of allegations) was the failure to complete required ethics forms.

The OIG also discovered that while 60% of the allegations were resolved internally, 7% were referred to the OIG, and 33% of the cases lacked proper documentation to determine how or if they were resolved.

Additionally, the OIG found that most of the Institutes’ ethics boards do not have written procedures that describe how to handle violations of conflict-of-interest and ethics regulations. Each of the 27

NIH ethics divisions has a different policy regarding whether, and if so when, the NIH Ethics Office, the OGC Ethics Division, or OMA is consulted.

Therefore, while coordination among these different offices occurs, it is not a formalized process, as no written policy exists.

The report ends with OIG’s recommendations. It suggests that NIH “Develop a formal, written policy outlining how allegations of conflicts of interest and ethics violations are to be handled among the Institutes’ ethics offices, the National Institutes of Health Ethics Office, the Office of the General Counsel Ethics Division, and the Office of Management Assessment.” It also proposes that NIH ethics offices “ensure that documentation detailing how allegations are ultimately resolved is maintained.”

To read the report:

<http://www.oig.hhs.gov/oei/reports/oei-03-07-00220.pdf>

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### MEDICAL RESEARCH vs. PATIENT PRIVACY

A medical research plan, under consultation in the UK’s National Health Service (NHS), is under criticism. This plan, in the draft NHS constitution, authorizes medical researchers to access the personal files of patients to identify valid subjects for trials of new drugs and treatments.

The prime minister and Department of Health vigorously support this proposal, as it gives British researchers an advantage over overseas competitors by granting them access to over 50 million medical records. This allows researchers to solicit patients directly for participation in research trials, as opposed to the current system in which researchers ask general practitioners to solicit patients for their studies. Since not all practitioners are equally helpful, many patients are not solicited and sampling bias is possible.

However, the National Information Governance Board for Health and Social Care, responsible for advising the NHS on issues involving consent, confidentiality, security and data sharing,

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has called for the dismissal of this measure. Harry Cayton, its chair, describes this proposal as “ethically unacceptable,” since it breaks doctor-patient confidentiality by allowing researchers to know the intimate medical secrets of patients without their informed consent.

Cayton questions the legal basis for this step, which “would be saying there is a public interest in research that is so great that it overrides consent and confidentiality. That is not a proposition that holds up.”

A report on data sharing issued last year by Richard Thomas, the information commissioner and Mark Walport, director of the Wellcome Trust, argued the current situation in which there is a requirement for “consent to gain consent’ . . . is a problem that requires a solution.” They proposed allowing approved researchers “bound by the same duty of confidentiality as the clinical team providing care” to identify trial subjects.

The NHS is considering the Board’s opinion along with other feedback and expects to publish a response shortly.

Read more at:

<http://www.guardian.co.uk/society/2008/nov/17/nhs-patient-privacy-medical-research>

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## ONE STEP CLOSER TO “HUMANZEES”?

On November 13<sup>th</sup>, the Human Fertilization and Embryology Act 2008 received Royal Assent. This Act, which regulates the acceptable use of assisted reproduction technology and the use of embryos in research and therapy within the UK, updates the existing 1990 Act in response to new scientific advances.

The new law increases the scope of research allowable under the Human Fertilization and Embryology Authority (HFEA). HFEA now has explicit legal authority to approval research involving interspecies nuclear transfer, in which a human cell is implanted into an animal egg, the creation of transgenic embryos, an embryo with both human and animal genes, and the formation chimeric

embryos, formed by a mix of human and animal eggs and sperm.

There was strong opposition to the law. Critics, headed by pro-life parliamentarians and Catholic Church leaders, warned that the Act would begin a slippery slope towards the creation of “humanzees,” half-ape half-human creatures, and “minotaurs.”

However, scientists were able to convince Parliament that no human hybrids would result from this legislation. The Act safeguards against such a result by forbidding the development of human-animal embryos past 14 days and the implantation of such an embryo into any animal.

Additionally, scientists highlighted the benefits of these techniques: increased insight into the fertilization process, and increased number of stem cells upon which to study diseases like Alzheimer’s and Parkinson’s, instead of relying on scarce human oocytes.

Other changes include the legalization of the creation of “savior siblings,” children created to provide genetic material for a sick brother or sister, and the removal of restrictions preventing lesbians and single women from undergoing in-vitro fertilization.

Read the Act:

[http://www.opsi.gov.uk/acts/acts2008/uk\\_pga\\_20080022\\_en\\_1](http://www.opsi.gov.uk/acts/acts2008/uk_pga_20080022_en_1)

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## U.S. ARMY POLICY ON RELEASING MEDICAL INFORMATION QUESTIONED

In October 2008, EPI Medical News & Exposé, an online investigative reporting service, reported that the U.S. Department of the Army was using its Release of Actionable Medical Information (AMI) Policy to suppress publication of scientific research [1]. Author Bryant Furlow quoted both nongovernmental experts and an Army Major who had a run-in with Army Medical Department (AMEDD) officials responsible for enforcing the AMI Policy. The AMI Policy was set forth in a 2 December 2005 memorandum issued by Army Medical Command (MEDCOM).

Under the Freedom of Information Act (FOIA), EPI obtained access to a

database used by MEDCOM to track AMI reviews. They reported that 312 total unclassified studies and presentations have been reviewed by MEDCOM since the policy was issued. Of those, fewer than half had been approved without revisions. The article also noted an increase in outright denials of permission for public release, rising from 6% in 2007 to 17% from January through October of 2008.

Katherine Rabb, a lawyer with the National Coalition Against Censorship (NCAC), authored a statement regarding the AMI policy, which states in part, “A FOIA request revealed nothing about the information removed by [Army] reviewers, the rationale for censoring that information, and determinations on appeal. We do know, however, that the Army requires public affairs reviewers to vet all materials under the policy to ensure propriety” [2].

The EPI article reports that Remington Nevin, M.D., M.P.H., an Army Major at the Armed Forces Health Surveillance Center in Bethesda, faces disciplinary action for writing a letter to the editor of *Stars and Stripes* magazine, in which he suggested a correlation between prophylactic anti-malarial drug treatment and a form of pneumonia among deployed troops who are new smokers [3]. “It is fairly obvious what the true motivation behind the policy is. The war on terrorism has provided a convenient excuse to stifle scientific discourse and the release of information on government operations,” wrote Major Nevin.

The head of MEDCOM’s AMI review process, Ann Ham, was unaware of any specific appeals underway; indeed, colleagues of hers confirmed that no AMI appeals board has convened to reconsider an initial review decision. “We try to work with [authors], to identify problems and find solutions together so studies don’t have to be denied approval,” said Ham.

However, the 2005 AMI policy does not set forth clear guidelines for what unclassified information may be restricted and under what grounds. Jim Balassone, of the Markkula Center for Applied Ethics at Santa Clara University, referred to “the censor’s lack of a written policy on what they might change, alter,

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or delete – or even add. This gives them leeway to censor anything for any reason, unbeknown to the reader.”

In the final analysis, it would be important to know whether MEDCOM’s AMI review panel includes scientists whose expertise is used to make judgments about the implications of public release of medical and scientific information under review. Further, it would be helpful to know whether restricted data eventually become accessible to scientists and medical personnel within the Department of Defense, whose own work could conceivably benefit from such AMI. Increased transparency of the AMI review process may ultimately assuage concerns about scientific censorship occurring under the Army’s policy.

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[1] Furlow, Bryant, *U.S. Army delays, alters medical studies under little-known scientific censorship program*, EPI Medical News and Exposé, 21 October 2008. The article, which contains a link to the two December 2005 Army memoranda creating the Release of Actionable Medical Information Policy, may be accessed at

<http://www.epinews.com/AMI.html>.

[2] Rabb, Katherine A., Esq., *Statement of the National Coalition Against Censorship’s The Knowledge Project: Censorship and Science*, [http://www.epinews.com/AMI\\_Statement\\_NCAC\\_Rabb.html](http://www.epinews.com/AMI_Statement_NCAC_Rabb.html)

[3] Nevin, Dr. (Maj.) Remington, *Look at anti-malarial drug*, Letters to the Editor for Friday, October 10, 2008, *Stars and Stripes*. A copy of the letter is available via a link in the EPI article cited in Reference 1.

## VATICAN MAKES STRONGEST STATEMENT YET ON REPRODUCTIVE S&T

On December 12 the Vatican released its first authoritative statement on reproductive health, science and technology in more than two decades. The sweeping document—called “Dignitas Personae,” which is Latin for “the dignity of a person”—which at times refers to the positive impact scientific research can have on humankind, condemns human embryonic stem cell research as well as other procedures involving human embryos such as in vitro fertilization and pre-implantation genetic testing.

Catholic leaders have already addressed many of these views in some fashion, but the official document reflects their desire for a more formal decree as some of the technologies listed therein become increasingly common.

The primary justification for the Vatican’s opposition to embryonic stem cell research is well-known: the idea that life begins at conception and therefore an embryo qualifies as a sacred human life. Based on this belief, the Vatican has disavowed the freezing of embryos, arguing that it exposes them to potential damage, and screening embryos for genetic markers, which can help parents decide which embryos to implant.

Also on the list of recommended bans are cutting-edge scientific pursuits such as genetic engineering, as well as certain forms of birth control, such as the “morning after” pill, that are deemed tantamount to abortion.

The issue of embryo adoption is a bit fuzzier. It is not explicitly rejected, but the Vatican cautions that the practice could encourage the creation of more embryos outside of the body. “Thousands of abandoned embryos represent a situation of injustice which in fact cannot be resolved,” save to eliminate the practice of freezing embryos completely, according to the document.

Another overarching principle of Dignitas Personae is the idea that children should result only from the intercourse of a married heterosexual couple. Therefore practices such as in vitro fertilization and surrogate motherhood are discouraged.

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## EDUCATING SCIENTISTS ABOUT DUAL USE POTENTIAL OF THEIR RESEARCH

For many, the pursuit of science is ignited by the drive to better humanity. Many scientists engage in research to help improve the lives of others and expand society’s scientific and technological capabilities. Sadly, the terrorist and anthrax attacks of 2001 reminded the public that science and technology have the potential for nefarious uses. While some individuals may actively engage in research intended for malicious purposes, scientists who are

well-intentioned may be unaware that they are working with materials or conducting experiments that can be used by others for malevolent objectives.

## Biosecurity and Dual Use Research

To prevent and prepare proactively for a possible biological threat, the terms “biosecurity” and “dual use research” have circulated in various communities, including the security and scientific research communities. The World Health Organization (WHO) defines laboratory biosecurity as the “protection, control and accountability for valuable biological materials within laboratories, in order to prevent their unauthorized access, loss, theft, misuse, diversion or intentional release” [1]. “Dual use research” in the life sciences is considered as beneficial research with the potential for misuse. Unfortunately, studies have shown that many scientists do not know what these terms mean or are completely unfamiliar to them [2]. Although oversight of biological weapons has been discussed or implemented, such as the Biological and Toxin Weapons (BWC) Convention of 1972 [3] and codes of conduct for scientists [4], only modest efforts have been initiated to educate scientists about the laws and regulations pertaining to biosecurity, and little has been done to raise scientists’ awareness on the possible dual use implications of their research. This information is unsettling, given that the Commission on the Prevention of WMD Proliferation and Terrorism released a report, *World at Risk*, in December 2008 stating that a nuclear or biological attack in a major world city is likely to occur within the next five years [5].

## Efforts to educate scientists on dual use research

Currently in the United States, the National Science Advisory Board for Biosecurity (NSABB), a body established in 2004 to guide federal agencies, federally funded research institutions and scientists on issues of dual use, is developing policy recommendations for oversight and education. *World at Risk* urges that life scientists undergo mandatory training on dual use dilemmas in research. AAAS convened a workshop of experts in November 2008 and released a workshop report in

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December 2008 that includes policy recommendations for the NSABB, the U.S. government, research institutions, and scientific organizations. In its 2007-2008 study, AAAS identified only thirteen education programs for scientists specifically addressing dual use research or biosecurity [6].

International cooperation, discussion and other regulatory endeavors have also burgeoned in the global arena. Mandatory education and training have been supported by researchers at the Australian National University [7] and the Israeli government recently passed legislation enforcing mandatory training [8]. For its 2008 annual meetings at the U.N. in Geneva, Switzerland, the BWC, which prohibits the “development, production, stockpiling, acquisition or retention of harmful biological agents” [9], listed the issues of education and awareness-raising for life scientists on its agenda. At the BWC Meeting of Experts in August 2008, federal and non-governmental experts, including those from the United States, UK, Norway, Indonesia, Korea, China, New Zealand, Australia, and Cuba, proposed ways to foster training and awareness; and at the BWC Meeting of States Parties in December 2008, representatives from Canada, Australia, Algeria, Kenya, Pakistan, the United States, and the UK acknowledged their support for educating its scientists on the potential misuse of their work, and among these states, several described proposed or ongoing efforts to continue building awareness within the scientific community [10].

In terms of actual education programs abroad, a study by the Landau Network, Centro Volta, Italy, and the University of Bradford, UK, revealed that out of the 144 graduate courses surveyed throughout the European Union, only 28 made a reference to the dual use dilemma [11]. In other regions of the world, programs specific to biosecurity and dual use research have been designed or are in the process of being designed in Japan and regions of Africa [12].

#### *Next Steps*

A call to action has been raised on both domestic and international fronts. Several tools have been made available in the form of online modules [13], codes of

conduct [14], and program exemplars from various institutions in different parts of the world. Yet, many scientists working in the life sciences are still unfamiliar with biosecurity concerns and dual use issues. At the November 2008 workshop held by AAAS, among several issues that were discussed, it was noted that the difficulty in creating widespread programs and sustaining them stems from the lack of funding and lack of mentoring scientists. Whether or not these programs are required for scientists or advocated in statements, without financial support or support from senior scientists in seeing the value of teaching the subject, dual use research education is not likely to establish itself within the scientific community. Helping researchers become more aware of the potential harms resulting from their work may not only bolster national and international security, but also encourage more scientists to think about their ethical and social responsibilities to the public.

To view the AAAS workshop report and its full set of recommendations, go to: [http://cstsp.aaas.org/files/AAAS\\_workshop\\_report\\_education\\_of\\_dual\\_use\\_life\\_science\\_research.pdf](http://cstsp.aaas.org/files/AAAS_workshop_report_education_of_dual_use_life_science_research.pdf)

\*JS

[1] WHO Laboratory Biosafety Manual, 3rd Edition, 2004.

[2] [http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC\\_Fostering%20Biosecurity%20Norm.pdf](http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC_Fostering%20Biosecurity%20Norm.pdf)

[3] <http://disarmament.un.org/WMD/bwc/BWCtext.htm>

[4] [http://biosecuritycodes.org/codes\\_archive.htm](http://biosecuritycodes.org/codes_archive.htm)

[5] <http://www.preventwmd.org/report/>

[6] [http://cstsp.aaas.org/files/AAAS\\_workshop\\_report\\_education\\_of\\_dual\\_use\\_life\\_science\\_research.pdf](http://cstsp.aaas.org/files/AAAS_workshop_report_education_of_dual_use_life_science_research.pdf)

[7] <http://www.cappe.edu.au/docs/reports/consultancy/DualUseExecSumm.pdf>

[8] Bill for the Regulation of Research into Biological Disease Agents, 2008. Israel.

[9] <http://disarmament.un.org/WMD/bwc/BWCtext.htm>

[10] For the 2008 BWC Meeting of Experts, see [http://www.unog.ch/80256EE600585943/\(http:Pages\)/8C24E93C19BDC8C4C12574F60031809F?OpenDocument](http://www.unog.ch/80256EE600585943/(http:Pages)/8C24E93C19BDC8C4C12574F60031809F?OpenDocument); for the 2008 Meeting of States Parties, see [http://www.unog.ch/80256EE600585943/\(http:Pages\)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument](http://www.unog.ch/80256EE600585943/(http:Pages)/F1CD974A1FDE4794C125731A0037D96D?OpenDocument).

[11] [http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC\\_Fostering%20Biosecurity%20Norm.pdf](http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC_Fostering%20Biosecurity%20Norm.pdf)

[http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC\\_Fostering%20Biosecurity%20Norm.pdf](http://www.centrovolta.it/landau/content/binary/LNCV%20-%20BDRC_Fostering%20Biosecurity%20Norm.pdf)

[12] [http://cstsp.aaas.org/files/AAAS\\_workshop\\_report\\_education\\_of\\_dual\\_use\\_life\\_science\\_research.pdf](http://cstsp.aaas.org/files/AAAS_workshop_report_education_of_dual_use_life_science_research.pdf)

[13] Online modules can be found at <http://www.fas.org/programs/ssp/bio/educationportal.html>

[14] [http://biosecuritycodes.org/codes\\_archive.htm](http://biosecuritycodes.org/codes_archive.htm)

## In the Societies

### NOTHING SECRET ABOUT THIS: AAA PROPOSES CHANGE TO CODE OF ETHICS

In fall 2007, the American Anthropological Association voted to restore sections of the 1971 version of their code of ethics, which states that anthropologists “should undertake no secret research or any research whose results cannot be freely derived and publicly reported.” This decision stemmed from growing unease over the increasing use of social science in military and intelligence programs.

In order to comply with this mandate, a draft of proposed revisions was unveiled in late September 2008. The proposed changes were distributed to all AAA members for a comment period, and were a main topic of discussion at the AAA annual meeting in November.

The proposed changes take a stricter stance on protecting the research subjects, changing the phrase “researchers must do everything in their power to ensure” to “researchers must ensure that they do not harm the safety, dignity, or privacy of the people with whom they work, conduct research, or perform other professional activities.”

Additionally, anthropologists are required to be “honest and transparent with all stakeholders about the nature and intent of their research,” and not “misrepresent their research goals, funding sources, activities, findings.”

A new section of the code was added entitled “Dissemination of Results.” This places the moral obligation on anthropologists to consider the potential impact of their research both when pursuing and disseminating such knowledge. While stating that anthropologists “should not withhold

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participants when those results are shared with others,” the code provides some exceptions for cases where non-disclosure can “protect the safety, dignity or privacy of participants, protect cultural heritage or tangible or intangible cultural or intellectual property.”

The membership is set to vote on the adoption of this revised code of ethics in December. Additionally, this has set in motion an effort to revise the entire AAA Code of Ethics by November 2010.

To read more:

<http://aanewsinfo.blogspot.com/2008/09/proposed-changes-to-aaa-code-of-ethics.html>

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### ACS ISSUES NEW STATEMENT ON SCIENTIFIC INTEGRITY

Noting that the U.S. government “faces a wide range of critical and complex issues that involve significant technical challenges, ... and during the last decade, ... traditional mechanisms for securing insightful, unbiased technical input are showing significant signs of strain, the American Chemical Society adopted a policy statement on *Scientific Insight and Integrity in Public Policy* (November 2008) recommending, among other things, that “Membership of federal scientific and technical advisory committees should be based on appropriate technical expertise, breadth of experience, availability and willingness to serve. Employer, professional or political affiliation, and prior policy positions should not preclude someone from being included on scientific/technical advisory committees.” Other matters addressed in the Statement include the rights and obligations of government scientists and engineers, the use of scientific data and analysis in policy making, and the need for Congress to improve its access to relevant scientific and technical information.

The full Statement is posted at [www.acs.org/sciencepolicystatement](http://www.acs.org/sciencepolicystatement).

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## Resources

### OPEN ACCESS DIGITAL LIBRARY ON APPLIED ETHICS

Globalethics.net has launched a new digital library providing open access to full articles on applied ethics. With this new resource, Globalethics.net hopes to promote timely information of the highest quality on applied ethics throughout the world, particularly in Africa, Asia and Latin-America. Approximately 200 journals and over a million articles are available through the library. Users are also given the opportunity to submit their own bodies of work, including dissertations, books, articles, journals, and newsletters. Visit: <http://www.globethics.net/web/guest/library>.

### TEACHING ETHICS IN THE SCIENCE CLASSROOM

The Northwest Association for Biomedical Research (NWABR), a non-profit organization established to promote the public understanding of the implications and applications of biomedical research, offers ethics education materials for teachers. It currently has two resources to help facilitate the teaching of ethics in biomedical research: 1) Ethics Primer (<http://www.nwabr.org/education/ethicslessons.html>), which includes 170 pages of ways to integrate ethics lessons in a science classroom; and 2) Professional development on teaching ethics for secondary science teachers (<http://www.nwabr.org/education/esc.htm>).

### FASEB WEBSITE ON BIOMEDICAL RESEARCH ADVOCACY

The Federation of American Societies for Experimental Biology (FASEB) has launched a new website ([www.nihadvocacy.org](http://www.nihadvocacy.org)) as a resource for the biomedical research advocacy community. “There are many organizations and individuals interested in promoting the extraordinary medical breakthroughs funded by the National Institutes of Health (NIH),” said Howard Garrison, Ph.D. Howard Garrison, Ph.D., FASEB’s Deputy Executive Director for Public Policy and Director of the Office of Public Affairs. “We wanted to make it easier for the research community, policymakers, and members of the public

to find the data and materials they need to advocate for this lifesaving agency.”

The NIH Advocacy Clearinghouse comprises links to data resources, reports, educational materials, NIH resources, and tools for scientist-advocates. “After years of flat-funding, it is more important than ever for the biomedical research community, from scientists to patients to research institutions, to be united and engaged in making the case for NIH,” he said. “There is a wealth of compelling information out there, and it is our hope this resource will provide a common ground for NIH advocates to pool our collective talent and resources.” FASEB plans to regularly update the site and welcomes contributions and feedback from the advocacy community.

### FASEB WEBSITE ON ANIMAL RIGHTS EXTREMISM

The Federation of American Societies for Experimental Biology (FASEB) has launched a new website to provide the research community with information and resources on animal rights extremism ([www.animalrightsextremism.org](http://www.animalrightsextremism.org)). “We are hoping to raise awareness about the threat posed to biomedical research by groups and individuals who use dangerous, criminal tactics in opposition to research using animal models,” said Carrie Wolinetz, Ph.D, FASEB Director of Scientific Affairs and Public Relations. “In particular, we want researchers who have been targeted by these groups to have centralized access to the resources available to assist them. Scientists need to know that the research community supports them and they are not alone.”

The site contains factsheets about animal rights extremism, including incidence reports from around the nation. There are also guides for researchers and institutions that have come under attack and position statements from the research community. “We also connect to resources illustrating the importance of the use of animal models for medical research,” according to Wolinetz. “FASEB is committed not only to the proper care and humane treatment of laboratory animals, but also to educating the public about the vital contribution of animals used in research to human and animal health.”

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## Announcements

**Call for Papers - Science & Technology in Society: An International, Interdisciplinary, Graduate Student Conference** provides a venue for graduate students from Science & Technology Policy, Science & Technology Studies and related fields to present their research. Email abstracts to [abstracts@stglobal.org](mailto:abstracts@stglobal.org) by January 23, 2009. Visit: <http://www.stglobal.org>

**Call for Papers - IEEE Computer** seeks submissions for a June 2009 special issue dedicated to software engineering ethics in a digital world. Topics can range from field studies of software systems operating in ethically challenging contexts to methodologies, processes, and codes of conduct. A multi-disciplinary point of view on the challenges to existing software engineering practices that stem from social science, psychology, and criminology is encouraged. Visit: [www.computer.org/portal/pages/computer/content/author.html](http://www.computer.org/portal/pages/computer/content/author.html)

**Call for Papers - SPT 2009** welcomes high quality papers and panel proposals in all areas of philosophy of technology. Papers dealing with converging technologies and their social and cultural impact are welcome. Visit: [www.utwente.nl/ceptes/spt2009](http://www.utwente.nl/ceptes/spt2009)

**Call for Papers - The Journal of Educational Controversy** is inviting manuscripts for its Special Ethics Issue. Authors from all professions are invited to compose a dilemma that pits a democratic decision or widely held view against the expertise of professional standards or other imperatives faced by a professional, examine the choices that would have to be weighed, and consider the most ethical position that should be taken. Due: May 31, 2009. Visit: <http://www.wce.wvu.edu/eJournal/>

**Call for Papers - JAMA and BMJ** invite abstracts for the Sixth International Congress on Peer Review and Biomedical Publication. Authors of new research on peer review and scientific publication have an opportunity to present their papers. Topics covering editorial and funding peer review, publication, and information exchange will be considered. Visit: [www.jama-peer.org](http://www.jama-peer.org)

**Conference - The 2009 Teaching Research Ethics Workshop** will take place at Indiana University on May 12-15, 2009. Topics will include ethical theory, trainee and authorship issues, conflicts of interest, and responsible data management. Many sessions will feature techniques for teaching, developing curriculum, using case studies, and assessing the responsible conduct of research. Visit: <http://poynter.indiana.edu/tre>

**Conference - The ESF-Conference Series** on "Science and Values" will be hosted by Bielefeld University and the Center for Interdisciplinary Research (ZiF), and is being organized by the Institute for Science and Technology Studies (IWT) of Bielefeld University in cooperation with the European Science Foundation. The conference series will cover the politicization, commercialization, and medialization of science. Abstract submissions and application for attendance due: February 22, 2009. Visit: <http://www.esf.org/activities/esf-conferences/details/2009/confdetail286.html?conf=286&year=2009>

**Conferences - IRB 101sm, IRB Administrator 101, and Essentials of IACUC Administration** are courses geared specifically to meet the educational needs of the IRB/HRPP and/or IACUC member, administrator, and staff. The event will take place in Houston, TX on February 3-5, 2009. Visit: <http://www.primr.org/Conferences.aspx?id=5673>

**Conference - The Evolution Learning Community** at the University of North Carolina, Wilmington, will be hosting *Darwin's Legacy: Evolution's Impact on Science and Culture* - a multidisciplinary student conference held on March 19-21, 2009. The conference will be an opportunity for undergraduate and graduate students in the natural sciences, social sciences, humanities, and arts who are conducting research or creative endeavors related to evolution to present their research, investigate graduate study opportunities, network, enhance their CVs, and enrich the body of knowledge surrounding evolution. Abstracts due: January 30, 2009. Visit: <http://library.uncw.edu/web/outreach/evolution/conference/>

**Conference - The Office of Research Integrity and Roswell Park Cancer Institute**

are sponsoring the *2009 Research Conference on Research Integrity*, which will be held on May 15-17, 2009 in Niagara Falls, NY. Visit: [www.roswellpark.org/register](http://www.roswellpark.org/register)

**Conference - The Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC), International, Office of Laboratory Animal Welfare, National Institutes of Health (OLAW/NIH), and the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA/APHIS) are hosting *Our Public Responsibility to Animals and Society* on March 30-31, 2008 in San Diego, CA. Visit: <http://www.primr.org/Conferences.aspx?id=5913>**

**Funding - The National Institute of Child Health and Human Development and the Office of Research Integrity** encourage applications from institutions proposing to study research integrity as it relates to collaboration in at least one of these areas: clarification of community norms and standards, effectiveness of self-regulation, the societal, organizational, group, or individual factors affecting research, or impacts of non-adherence to codes of conduct. Funding for FY2009 is anticipated to be \$850,000 in total costs to support two to three new awards. Applications due: March 17, 2009. Visit: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-09-004.html>

**Funding - The National Human Genome Research Institute** is soliciting grant applications for Centers and Exploratory Centers of Excellence in ELSI Research (CEERs). The CEER program is designed to develop research teams that have the expertise and flexibility to anticipate, conduct research on, and respond rapidly to ELSI issues related to emerging genome technologies and the growing proliferation of genomic information. Visit: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-09-003.html>

**New Media - PRIM&R** has announced a new blog called, "Ampersand." Visit: <http://primr.blogspot.com/>

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American Anthropological Association  
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