

Professional Ethics Report



ADVANCING SCIENCE, SERVING SOCIETY

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

VOLUME XIX

NUMBER 1

Winter 2006

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Intelligent Design: Religious Concerns Aside, It Is Still Troubling

From Pennsylvania and Ohio to Kansas and Utah, battles wage on during school board meetings and legislative sessions concerning how public schools should handle the topic of evolution. Intelligent Design theory is a relatively new participant in these debates, and as a result, it was not known, until recently, how the courts would respond to it. Whereas challenges to evolution have typically been dismissed on constitutional grounds, Intelligent Design was articulated in a cautious and deliberate manner so that it might successfully withstand legal scrutiny. Although the notion that an intelligent being created life is far from new, recent advocates of design theory have tried to incorporate scientific concepts and terminology in a more sophisticated fashion than their predecessors did.

Historically, the legal system endeavored to determine whether alternatives to evolution should be characterized as science or as religion, a strategy commonly used to handle cases involving creationism. After weighing the merits of Intelligent Design, a federal judge, John E. Jones III, held that it is not science and thus should be barred from science classrooms in the Dover Pennsylvania school district.^[1] It is understandable why Judge Jones's decision has been praised as being a victory for

science.

A legal ruling such as this could generate a precedent that keeps "design" out of science classes in other school districts (as opposed to what might occur if local school boards decide the matter). Yet it is not clear that the arguments supporting design theory should be labeled as being religious in nature.

There is a strong temptation to say that the teaching of Intelligent Design violates the Establishment Clause considering the underlying religious motives of its supporters. The agenda of design theorists may, and often does, coincide with the goals of religious organizations, but that alone might not be sufficient to prove that their arguments are unscientific. It would be overly hasty and uncharitable to assume that merely because someone is religious, that she cannot genuinely be interested in promoting good science. Further, in principle, one does not necessarily have to be a theist to be swayed by Michael Behe's "irreducible complexity" argument,^[2] William Dembski's argument concerning statistical improbabilities,^[3] or Stephen Meyer's argument about the "Cambrian explosion."^[4] There is suitable justification for claiming that these arguments have their share of flaws, which is one reason why the scientific community has largely rejected them. Yet a primary and essential way of revealing these flaws is through examining the empirical evidence.

Placing the arguments of design theorists within the domain of religion can sidetrack the dispute from the crucial issue, which is whether any of the claims being offered have supporting evidence behind them. Many of the key arguments for design can be challenged, and perhaps already have been refuted, on scientific grounds.^[5] Further, it is probably unwise

to encourage the courts, legislators, and school boards to participate in an age-old, and perhaps intractable, philosophical debate concerning whether there is a firm and decisive dividing line between science and religion.^[6] When these groups rekindle arguments about whether a set of criteria exists that distinguishes science from other fields of inquiry, it may generate more problems than it solves. Scholars disagree, for example, about whether Michael Ruse^[7] or Larry Laudan^[8] has put forward the superior view concerning the decision in *McLean v. Arkansas*.^[9]

On a related note, assuming that the problem of demarcation can be solved and that the relevant criteria have been accurately identified, we can certainly question whether non-scientists such as judges and public officials will be able to apply the criteria properly and consistently. The strategy of labeling Intelligent Design as being religion might be fraught with problems, but there are compelling reasons why we should be wary of the view. For one, design theorists explicitly refuse to shed light on the nature and identity of the "designer." It is rather suspicious that scholars, who allegedly offer a theory that is scientific in nature, acknowledge that there are significant components of their theory for which they will not provide an explanation. This is an especially troubling practice since it appears to be done to accomplish a predetermined legal goal, the acceptance of design in biology classrooms, rather than for purely scientific reasons.

Within their writings, design theorists primarily focus their attention on delineating *alleged* shortcomings contained within evolutionary theory.

(Borenstein continued from page 1)

Although critiques can be useful, design theory falls short of providing a coherent set of positive claims about how the world works. Scientists rightly complain that Intelligent Design offers little or no direction for future research avenues. For example, what kind of experiment could be constructed to determine how the designer created biological mechanisms such as blood clotting? There is plausibility behind the cynic's suggestion that design theory may just amount to a complex series of arguments from ignorance, honing in on both real and supposed gaps in our knowledge about the world. It does not advance our understanding beyond informing us that scientists have not fully solved all of the key questions for which we seek answers.

There is also reason to be skeptical about design theory because of the frequency with which supporters of design make use of non-scientific avenues to gain support for their view. The mainstream scientific community is not clamoring for the modification of evolution education so that it becomes more "ID-friendly." Rather, momentum behind the attempt to gain acceptance for design is generated, for example, from government officials who are sympathetic to it. Politicians, such as Senator Rick

Santorum from Pennsylvania, play a key role in pushing forward various different kinds of initiatives that "encourage" teachers to criticize evolution, and these individuals are not typically scientists.

Design supporters are quick to attack flaws that they detect in evolution, which leads them to endorse the "teach the controversy" approach.^[10] Although the design movement operates under the guise of promoting good pedagogy, it is unclear how this goal is being accomplished if political mandates, such as the one that was temporarily enforced in Dover, and parental pressure are interfering with how biology teachers run their own classrooms. Evolution is such a politically-charged issue that it causes some biology teachers to present a caricature of the topic or avoid it altogether in order to avoid the wrath of parents, politicians, and school board officials.^[11] Arguably, the goal of teaching students good science is not being upheld if our philosophical and religious disagreements interfere with the ability of teachers to discuss a topic they know is central to the biology curriculum. The work of scientists instead of political rhetoric should determine which scientific theories are presented in the biology classroom.

As a by-product of the seemingly endless public debates about evolution, too many students end up learning a diluted version of evolution.^[12] Hence, even if it was granted that genuine scientific rivals to evolution exist, which is a huge assumption, there would not be much value in presenting "alternatives to evolution." Unless students are accurately and sincerely being taught what evolution entails, they may just end up criticizing a straw man. Moreover, in accordance with the logic behind teaching students about disagreements relating to what people believe about the origin of human life, evolution and design are not the only two competing options that could be taught. The Raelians have articulated a theory concerning how

human life began and their view is a "rival," in some sense of the term, to evolution. However, merely because a group of people espouse a view and sincerely believe it, that is not sufficient to show it belongs in a science classroom. A hypothesis must prove its mettle by withstanding the scrutiny of the scientific community, and design theorists themselves seem to acknowledge, albeit grudgingly,^[13] that their theory has not passed this demanding test.

[1] "Court rejects 'intelligent design' in science class," *Cnn.com*, December 23, 2005, at <http://www.cnn.com/2005/LAW/12/20/intelligent.design.ap/> (last visited January 16, 2006).

[2] Michael J. Behe, "Irreducible Complexity: Obstacle to Darwinian Evolution," in Dembski and Ruse (eds.), *Debating Design: From Darwin to DNA*, Cambridge University Press, 2004, pp. 352-370.

[3] William Dembski, et. al., *The Design Inference: Eliminating Chance through Small Probabilities*, Cambridge University Press, 2006.

[4] Stephen C. Meyer, "The origin of biological information and the higher taxonomic categories," *Proceedings of the Biological Society of Washington*, Vol. 117(2), 2004, pp. 213-239.

[5] For example, Francisco Ayala seeks to explain how evolutionary theory undermines an appeal to a "designer" and to teleological explanations for natural processes in "Design without Designer: *Darwin's Greatest Discovery*," from *Debating Design: From Darwin to DNA*, edited by William A. Dembski and Michael Ruse, Cambridge University Press, 2004, pp. 55-80.

[6] A point of contention, for example, between scholars such as Stephen J. Gould and Richard Dawkins.

[7] Michael Ruse, "Pro Justice," *Science, Technology, & Human Values*, Vol. 7, 1982, pp.19-23.

[8] Larry Laudan, "Science at the Bar—Causes for Concern," *Science, Technology, & Human Values*, Vol. 7, 1982, pp.16-19.

[9] 529 F. Supp. 1255 (1982).

[10] Stephen C. Meyer, "Teach the Controversy," *Cincinnati Enquirer*, March 30, 2002, at http://www.arn.org/docs/meyer/sm_teachthecontroversy.htm (last visited January 8, 2006).

[11] C. Dean, "Evolution Takes a Back Seat in U.S. Classes," *The New York Times*, February 1, 2005.

[12] L.S. Lerner, "Good and Bad Science in US Schools," *Nature* 407: 287-290, September 21, 2000.

[13] From their own words, design supporters John Campbell and Stephen Meyer suggest that "Because intelligent design is a new theory, we, like Kansas' board, don't think students should be required to learn it." John Angus Campbell

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The *Professional Ethics Report* is published quarterly by the Scientific Freedom, Responsibility and Law Program in collaboration with the Committee on Scientific Freedom and Responsibility and the Professional Society Ethics Group, American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005, (202) 326-6606; Fax (202) 289-4950; E-mail: acollier@aaas.org; WWW <http://www.aaas.org/spp/dspp/sfrrl/sfrrl.htm>. Back issues of *Professional Ethics Report* are now on-line at <http://www.aaas.org/spp/dspp/sfrrl/per/per.htm>

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ISSN: 1045-8808

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

(Borenstein continued on page 3)

(Borenstein continued from page 3)

and Stephen C. Meyer, "Evolution: Debate it," *USATODAY.com*, August 14, 2005, at http://www.usatoday.com/news/opinion/editorials/2005-08-14-evolution-debate_x.htm (last visited January 16, 2006).

IN THE NEWS

GENE DOPING ORACLES OFF ON PREDICTIONS, DOPING MAY ARRIVE AT OLYMPICS NEAR YOU

Gene doping oracles may need to clean off their crystal balls and reshuffle their tarot cards in light of a trial under way in Germany. German coach, Thomas Springstein, has been accused of gene doping minors as far back as 2003, despite predictions from the scientific and athletic community that gene doping "was not practiced and that it would not become an actual threat before the 2008 Beijing Olympics."

Gene doping refers to uses of genetic materials to enhance athletic performance beyond an individual's normal biological limits. Current biotechnology has the potential to quickly add muscle mass, or extend endurance through more efficient exchange oxygen. While there are any number of chemicals and products that can create similar results, many of these methods are easily detected through simple blood or urine tests. Gene doping has the potential to bypass such detection methods by reprogramming the body's own software and hardware. Detection problems are not the only concerns. There can be serious safety risks involved in any genetic manipulations, and the sports world is not equipped to deal with them.

Springstein is being charged with a number of doping related offenses based in large part on email evidence found on his home computer. Evidence suggests that he attempted to acquire Repoxygen, a drug designed to increase oxygen exchange by increasing the red blood cell count. Whatever its outcome, the trial sends a message that forecasts about the progress of gene doping need to be revisited. <http://www.the-scientist.com/news/display/23101/>
<http://www.dw-world.de/dw/article/0,2144,1890782,00.html> *EAW

RIGOR, RESPECT AND RESPONSIBILITY: A UNIVERSAL ETHICAL CODE FOR SCIENTISTS

In 2004, at a meeting of science ministers and advisors from the G8 (Canada, France, Germany, Italy, Japan, the United Kingdom, United States and Russia) Sir David King, the British Chief Scientific Advisor organized a working group to consider developing a universal ethical code of conduct for scientists. The group believed that such a code would be most useful if it would:

- A. have an educational role, raising awareness among scientists and the public;
- B. capture a small number of broad principles that are shared across disciplinary and institutional boundaries;
- C. be adopted voluntarily by individual scientists and scientific institutions.

A draft code was circulated throughout institutions in the G8 and the European Union. Recipients were asked to complete a questionnaire regarding the perceived efficacy of the code and whether they would consider adopting or using it in their work.

"Rigor, respect and responsibility: a universal ethical code for scientists" is a public statement of the values and responsibilities of scientists. The aim of the code is to foster ethical research, to encourage active reflection among scientists on the wider implications and impacts of their work, and to support constructive communication between scientists and the public on complex and challenging issues. Its provisions include the following:

Rigor, honesty and integrity

1. Act with skill and care in all scientific work. Maintain up to date skills and assist their development in others.
2. Take steps to prevent corrupt practices and professional misconduct. Declare conflict of interest.
3. Be alert to the ways in which research derives from and affects the work of other people, and respect the rights and reputations of others.

Respect for life, the law and the public good

1. Ensure that your work is lawful and justified.
2. Minimize and justify any adverse effect your work may have on people, animals and the natural environment.

Responsible communication: listening and informing

1. Seek to discuss the issues that science raises for society. Listen to the aspirations and concerns of others.
2. Do not knowingly mislead, or allow others to be misled, about scientific matters. Present and review scientific evidence, theory or interpretation honestly and accurately.

According to a January 10, 2006 edition of *The Scientist*, the code has been given a trial run among British government scientists who have been overwhelmingly positive about the code. Supporters believe the code provides a context for junior members to whistle-blow if they see guidelines being broken. Critics say the code, because of its generality, does not offer real protection to whistleblowers. Generality also makes the code hard to enforce. The British government officially launched the code during Britain's National Science Week, March 10-19.

The Scientist "Scientists praise new UK ethics code," Stephen Pincock January 10, 2006 *AKC

EPA ANNOUNCES NEW SAFEGUARDS ON HUMAN STUDIES RESEARCH

On January 26, 2006 the EPA announced that all third-party intentional dosing research on pesticides involving children and pregnant women intended for submission to EPA is banned. Third-party studies are not conducted or supported by a federal agency. EPA will not conduct or support any intentional dosing studies involving pregnant women or children. These new rules also include stringent ethical safeguards to protect people who volunteer to participate in third-party intentional dosing

(News continued on page 4)

(News continued from page 3)

research. Susan Hazen, acting assistant administrator in EPA's Office of Prevention, Pesticides and Toxic Substances said, "Pregnant women and children should never be involved in these types of studies. Now adult volunteers will have the highest ethical safeguards available if they choose to participate in research studies."

With the implementation of these final regulations, the provisions of the Federal Policy for the Protection of Human Subjects of Research, also known as the Common Rule, will now include all third-party intentional dosing studies submitted to EPA. Additionally, EPA is establishing a Human Studies Review Board to independently review existing human studies and protocols for new studies. The final rule adopts regulations of the Department of Health and Human Services to provide additional protections beyond those of the Common Rule to pregnant women and children in EPA observational research and research not involving intentional exposure to any substance.

The initial draft of this first-ever rule on human testing of pesticides drew harsh criticism from public interest groups, Congressmen and even scientists. Critics say that ban leaves the door open for unethical conduct and serious liability problems. A spokesperson for the Natural Resources Defense Council said the new rules may lead to more pesticide testing on people because they will allow manufacturers to conduct "observational tests" that monitor individuals' everyday exposure to toxic chemicals.

Approximately 50,000 Americans commented on the proposal over three months. EPA typically received approximately 33 intentional dosing studies of all types annually. With the implementation of this new rule, EPA expects the number of systemic toxicity studies to drop to 0-1 per year.

*AKC

INTERNATIONAL PANEL ISSUES STATEMENT ON STEM CELL ETHICS

The Hinxton Group, an international

consortium of 60 researchers, ethicists, scientific journal editors, and lawyers, released a consensus statement in January 2006 on guidelines for ethical research on human embryonic stem cells (HESC). The message targets not only researchers, but all parties that play a role in developing ethical stem cell research practices. In addition to calling upon various players in this scientific enterprise to ensure legitimate research, the Hinxton group pointed out two areas they see as looming issue in stem cell research – derived gametes and chimeras.

Scientists engaging in HESC research are advised to treat stem cell and tissue donors as human subjects. The 'human subjects' classification is well established in the scientific community, and provides an implicit code of conduct for all parties. Human subjects must provide documented 'informed consent', or recognition that they knowingly accept the procedures they are undertaking and have been warned of any known possible adverse effects. Editors and journalists are urged to take a more proactive role in verifying stem cell research prior to article publication.

The Hinxton Group believes editors are empowered to demand proof of review from an accredited ethical review board as well as detailed descriptions of how co-authors contributed to the manuscript. Research funders should also play a larger role in verifying that sponsored research follows submitted protocols and is ethically sound according to national and international guidelines. Scientific societies are exhorted to engage in the ethical debate and assist in moving toward international consensus based on the Group's statement. Policy advisors and lawmakers are counseled to create clear HESC research legislation and ensure that laws are properly enforced. Finally, professionals involved in HESC research are advised to pool resources to create websites with HESC research data; ethical and legal analysis; opportunities for international collaboration; and 'international depositories of stem cell lines' for public use.

The prospect of deriving sex cells from donor stem cells and creation of non-human/human hybrids (chimeras) raise serious ethical questions for those involved in stem cell research. In the case of sex cell or gamete derivation,

there are questions about whether the stem cell donors are consenting that their tissues be used in such a fashion, and whether researchers would have the discretion to use the newly created reproductive cells without consulting the donor. Chimera pose another concern, raising issues of human dignity and natural order. The Hinxton Group argues the scientific community is ill prepared to handle these issues and needs to engage in a dialogue before research in these areas is pursued further.

Not everyone is enthusiastic about the Hinxton Group's findings. According to Laura Nelson's February 27th article in *The New Scientist*, several ethicists and scholars had some pointed criticisms in response to the Hinxton Group's statement. Lawyer Alta Charo from the University of California at Berkeley, and scientist Stephen Minger from King's College in London, both expressed doubt that some of the proposed guidelines would be adopted. Minger endorsed the United Kingdom's HESC regulations, many of which the Hinxton principles mimic, but seemed less sure about the principles' mass appeal to the international community. Charo pointed out that "some journals may be reluctant to be cast in the role of investigator rather than peer reviewers" and less likely to engage in some of the suggested screening procedures. The Hinxton Groups did not go far enough, according to Shahin Rafii, a Cornell University geneticist. He believes the Hinxton Group should have challenged governments with restrictive research regulations and pushed for "public funds for science."

The Hinxton statement is available online at: <http://www.hopkinsmedicine.org/bioethics/finalsc.doc> *AKC

CONGRESSIONAL HEARING ASKS, "CAN SOUTH KOREA STEM CELL FRAUD HAPPEN IN THE U.S.?"

In the March 7th hearing entitled "Human Cloning and Embryonic Stem Cell Research after Seoul: Examining exploitation, fraud and ethical problems in the research" before the Subcommittee

(News continued on page 5)

(News continued from page 4)

on Criminal Justice, Drug Policy, and Human Resources, subcommittee members asked expert panelists if the South Korean stem cell scandal was the exception, or the first case of a likely series of frauds that prove the rule – stem research requires special caution.

The hearing was divided into two witness panels. The first panel, and focus of this report, consisted of officials from the Department of Health and Human Services and the National Institutes of Health. Panelists addressed concerns about the general frequency of fraud in science, prevention measures currently in place, and bureaucratic delays in agency replies to legislative inquiries.

James F. Battey, Chair of the NIH Stem Cell Task Force, presented a breakdown of the three main points of fraud in the Korean stem cell scandal, as well as how the fraud was brought to light. Investigations into Hwang's research found there were never any somatic cell nuclear transfer (SCNT) stem cells created, photos of SCNT cells were fraudulent, and ethical violations in oocyte donation occurred. The fraud was discovered when researchers from Hwang's own lab came forward and discredited the work. When asked if the fraud would have been uncovered had Hwang's lab assistants not come forward, Battey responded that because science is about reproducibility, even if lab members had not come forward, when scientists could not reproduce Hwang's results, the research findings would have "fallen into disrepute." When confronted with questions about the value of stem cell research in light of this fraud he replied, "While the stem cell research fraud in South Korea is unacceptable, it does not reflect on the potential of human embryonic stem cell research one way or the other."

Bernard Schwetz and Chris B. Pascal testified to the procedural protections in place for research conducted under the auspices of the HHS. Schwetz, Director of the Office for Human Research Protections (OHRP), stated:

"The HHS is specifically prohibited by law from supporting 'research in which a human embryo or embryos are destroyed', as well as from supporting 'the creation of a human embryo or embryos

for research purposes', and that law (most recently P.L. 109-149, Title V, Section 509) defines human embryo to specifically include embryos created by cloning."

OHRP makes sure Institutional Review Boards (IRBs) and other safeguards are in place. He also noted that under current guidance about human embryonic stem cell (HESC) research, this type of research does not generally fall under the human subjects definition. The last fact is of some note since a number of groups (see section on the Hinxton Group in this issue) have recently called for HESC research and donation to be treated as human subjects to offer more protection. The Director of the Office of Research Integrity (ORI), Chris B. Pascal, explained how his office monitors institutions receiving federal research funds. When research misconduct is determined to have occurred, ORI reviews an institution's findings and then decides if it should investigate or affirm the institution's findings.

In the question and answer segment, Chairman Mark Souder (R-IN) was particularly interested in funding allocation for stem cell research. Battey announced that in 2005, \$40 million was allocated to stem cell research across 154 projects. Grants ranged from the smallest of \$2000 to the largest of \$4.2 million to start the National Stem Cell Bank. Dr. Gerald Schatten of the University of Pittsburgh and co-author of the discredited work in South Korea received \$1.1 million in 2005 from NIH for his stem cell research. When asked if Schatten was being investigated to determine his role, if any, in the fraud, panelists warned that any investigation is confidential until a finding is made and did not mention any such findings against Dr. Schatten.

The subcommittee chair then turned the topic to internal research regulation. In a past subcommittee hearing on drug use in baseball, it was pointed out how difficult it is for an institution to regulate itself when there are financial and prestige incentives not to find evidence of misconduct. Battey responded that current stem cell research law is a patchwork quilt of federal and state law. His department can only regulate research done involving federal funds. State funding allocated for stem cell research would lie beyond federal

regulation. More attention to ethics during scientific training was suggested to deter scientists from engaging in research misconduct.

<http://reform.house.gov/CJDPHR/Hearings/EventSingle.aspx?EventID=40390>

*EAW

THE SILENT MAJORITY FIGHTS BACK

On February 25, 2006, approximately 800 demonstrators took to the streets at Oxford University. But this was not a demonstration opposing war or bad cafeteria food. Rather, in an unprecedented development, the approximately 800 student and faculty demonstrators stood up and spoke out in favor of research using animals and against animal rights extremists. It was fitting that this demonstration took place in the UK, home to the most radical elements of the animal rights movement, many of whom have successfully exported their activities to the United States.

In 2004, Oxford University abandoned plans to build a \$33 million research facility that would expand the university's neurosciences program, including research using animals. Oxford was forced to take this step when one of the main building construction companies withdrew from the project after unremitting harassment, threats, and acts of violence directed against it by animal rights extremists. Dozens of violent attacks were perpetrated on the company's offices and trucks, workers were threatened at the building site, and shareholders received threatening letters telling them to sell their stock or see personal information about themselves and their children posted on the internet. Not surprisingly, the company's stock dropped precipitously. Additionally, the names and home addresses of Oxford scientists who conduct research with animals were posted on the internet. These actions of an extremist minority followed by only a few months Cambridge University's decision to cancel construction of what would have been Europe's largest primate facility, claiming that costs related to security made the project too expensive. (News continued on page 6)

(News continued from page 5)

Unannounced, Oxford resumed building in November 2005, a move that delighted the research community and infuriated the same extremist groups that had previously claimed victory in their war against research using animals. In a dramatic illustration that this was no ordinary construction site, over 100 security experts were recruited to protect the workers, who wore masks to hide their identities and who traveled to and from the university in unmarked trucks in an attempt to hide the identity of the contractor.

The workers took precautions for good reason. The web magazine *Bite Back* had posted messages from the Animal Liberation Front (ALF), which has been labeled a terrorist organization by the FBI, announcing “DO WHATEVER IT TAKES and blow these [expletive deleted] monsters off the face of the earth. We must target professors, teachers...students, investors, partners, supporters and ANYONE that dares to deal in any part of the university ...anything goes.” The website listed the names and addresses of 40 Oxford faculty and staff members, saying they were “legitimate targets,” and 100 companies that donate to Oxford were threatened unless they sever ties with the university.

However, in an unlikely development, the militants met their match in Laurie Pycroft, a 16-year-old “bedroom blogger,” who initiated a movement, Pro-Test, to support the construction of the long-postponed animal laboratory. Although Pycroft has since received death threats (“many badly written”), he says, “It’s time to speak out in support of scientific research.”

His call to action may have been the tipping point for the 85% of Oxford students who approve of biomedical research using animals. The movement attracted hundreds of student supporters, whose spokesman, Iain Simpson, says “Basically we want to get out there and make the point that...medical research involving animals is essential if medical science is to move forward.” Although the many faculty supporters are not all scientists, two prominent Oxford researchers have become

outspoken members of Pro-Test, Professors Tipu Aziz, a consultant neurosurgeon, and John Stein, a neurophysiologist. Celebrity scientist Stephen Hawking also spoke out in favor of research with animals, but the final word belongs to the chief executive of the UK’s Medical Research Council, Colin Blakemore – himself the target of animal rights extremists – who described the Pro-Test movement as “extremely gratifying...The people want this thuggery...off the streets of Oxford.”

On a more discouraging note, the Oxford animal rights activists are now heading for New York, where they plan to target clubs and restaurants hosting reunion events arranged by the Oxford Alumni Association of New York. But Laurie Pycroft will be rights on their heels, with an invitation to speak in New York and ambitions to go international. *DR

IN THE SOCIETIES

AAMC REVISED GUIDELINES FOR CLINICAL TRIALS

In January 2006, the Association of American Medical Colleges’ Executive Committee released a report entitled *Principles for Protecting Integrity in the Conduct and Reporting of Clinical Trials*, which revised guidelines for appropriate supervision of sponsored clinical trials, with particular attention to industry sponsored trials. The new guidelines call for timely publication of results, peer review, registration requirements, disclosure of authorship and relevant conflicts of interest, and adequate funding for publication.

The AAMC argues that researchers have an “ethical obligation...to make the results available publicly.” Given this obligation, the release of clinical trial findings must be timely, subject to peer review, unbiased, and with clear authorship. In order to realize these goals, the AAMC recommends that clinical trials have a Publication and Analysis Committee composed of trained experts, a majority of whom should be non-industry employees, and be charged with monitoring and facilitating research dissemination.

Clinical trial registration according to ICMJE standards was another revision added to the guidelines. ICMJE standards also include a mandate that all “published reports associated with the study” be made available to the public.

Bias in clinical trial reports was a significant concern to the AAMC. Specifically, the use of data from selected sites within a larger multi-site study constitutes what the AAMC considers a high “potential for bias.” Instead, the AAMC report suggests site-specific reports only be released after review by the aforementioned Publication and Analysis Committee, and “after the publication of the study as a whole.”

“Ghost or guest authorship is unacceptable,” according to the new guidelines because it precludes disclosure of any relevant conflicts of interest such as employment or consultancies. The new guidelines state that any such conflicts on the part of authors and investigators should be fully disclosed. Published study reports should also include a description of which portions of the study are attributed to each author.

Finally, adequate funding must be allocated to cover publication costs associated with the clinical trials to ensure that information is made available to the public. This calculation should be included in initial grant proposals, and publication must be completed even if a study is cancelled.

The report is available online at: <http://www.aamc.org/research/clinicaltrialsreporting/clinicaltrialsreporting.pdf> *EAW

RESOURCES

MAKING BABIES

The recent release of *Making Babies: Reproductive Decisions and Genetic Technologies* by the United Kingdom’s Human Genetics Commission presents the views of a prominent ethics body in the UK on a range of ethical issues associated with genetic screening, assisted reproduction technology (ART), and the trajectory of genetic policy and research.

A major theme of the report is the absence of adequate information.

(Resources continued from page 6)

Potential parents are being offered neither clear information about the accuracy or risks of genetic screening, nor the opportunity to “opt out” of genetic screening processes. In response, the HGC suggests counseling and social services should be offered to families of children diagnosed with severe genetic abnormalities during gestation.

Parents deciding to refrain entirely from screening during the pregnancy should be assured their wishes will be respected by their care provider and compensating social services and support will be available should they be required.

Another glaring information gap found by the HGC was that of the inner workings of private ART and donor clinics. Collecting such information is crucial to effective policy making, regulation, and public safety. Without careful monitoring, the HGC fears a number of abuses such as: improper donor screening, consanguinity due to excessive use of a single donor’s gametes, reproductive tourism (traveling to other countries to have procedures that are banned in the U.K.), or even selective genetics/eugenics. The report cited the U.S. case of a lesbian couple that intentionally sought a deaf male donor as the father of their two deaf children. The HGC spoke out in support of current UK procedures that prohibit such a case from arising in the UK. While they emphasize respect for deaf culture, they do not agree that such a procedure is in the best interests of the child. Furthermore, just as selective genetics for purposes of enhancement is not condoned, selection for specific genetic abnormalities should not be permitted. In addition, lack of medical and psycho-social data on children born of ART leaves researchers with no way of determining if ART children are more or less prone to certain medical conditions or suffer lasting mental harm. Such information could be invaluable to potential parents, doctors, and social services providers who would face these issues.

Finally, the HGC decried the lack of input from people of various religious, ethnic, and social backgrounds. One markedly absent but necessary voice in the reproductive genetics dialogue is that

of disabled persons. They encourage the UK government to continue research efforts such as the Youth Citizen’s Jury, which gathered feedback on various ART issues from a cross section of youth age 16 to 19 to address other gaps in public input. The report is available online via the HGC website at: <http://www.hgc.gov.uk/Client/document.asp?DocId=101&CAteoryId=8>

WHY GOOGLE WHEN YOU CAN G-E-O-OOGLE?

Ethicists have a new tool to add to their networking arsenal in the Global Ethics Observatory, a database supported by United Nation’s Educational Scientific and Cultural Organization (UNESCO). The GEO went online this past December. The new search engine is designed to help science and technology oriented ethicists from around the world to collaborate in order to realize shared goals. The current design includes three interfaces. The first interface is the “Who’s Who in Ethics.” This engine is collection of brief profiles on a number of scholars, educators, policy makers, and officials selected through peer review as key players in S&T ethics development. The second interface, “Ethics Institutions,” is a directory of various organizational bodies involved in S&T ethics. The “Ethics Teaching Programmes” is the third component of the GEO that provides information on science and technology ethics courses and programs of study. The “Ethics Related Legislation and Guidelines” represents the fourth arm of the GEO. While currently unavailable, it will be added at a later date and will cover laws and standards issues in S&T.

The GEO is available via the UNESCO homepage at: <http://www.unesco.org/shs/ethics/geo/user?action=select&lng=en&db=>

WRESTLING WITH BEHAVIORAL GENETICS

Wrestling with Behavioral Genetics: Science, Ethics, and Public Conversation is now available from The Johns Hopkins University Press. Edited by Erik Parens, Audrey R. Chapman, and Nancy Press, this book brings together an interdisciplinary groups of contributors. Human geneticists, humanists, social scientists, lawyers, and journalists

discuss the ethical and social implications of behavioral genetics research. The essays are intended to give readers the necessary tools to critically analyze the findings of behavioral geneticists, explore competing interpretations of the ethical and social implications of those findings, and engage in productive public conversation about them.

TIME FOR PLAGIARY?

A new journal, *Plagiarism: Cross-Disciplinary Studies in Plagiarism, Fabrication, and Falsification*, was launched in January 2006. With cases such as the stem cell fraud scandal in South Korea and allegations of censorship and editorial license from NASA scientists, the journal will offer an interdisciplinary forum to analyze evidence of fraud and constraints on scientific freedom, as well as assess the damage such incidents have done to the enterprise of scholarship.

The journal will include coverage in the forms of research articles, editorials, perspective pieces, book reviews, and reader responses. Articles are published online on a rolling basis and subject to “referee recommendation.” Published articles are open-access and available in electronic format free of charge via the web at <http://plagiarism.org/>. An annual volume in hard-copy format will be available for purchase at the end of each year.

BIOETHICS FORUM

The *Bioethics Forum* is a recently developed spin-off of the *Hasting Center Report*. The *Forum* will focus solely on bioethics issues. The new site provides real-time commentary from the *Forum*’s own panel of ethics scholars, as well as links to recent bioethics articles in other open-access online journals. Covering issues like “patient care, health policy, medical science and research, biotechnology, the beginnings and endings of life, and environment and health,” the site aims to reflect on bioethics issues in a ‘timely’ manner while preserving the confidence in expert authority lacking in some blog sites. The *Bioethics Forum* is available at: <http://bioethicsforum.org/>.

(Resources continued on page 8)

(RESOURCES continued from page 7)

HUMAN RESEARCH PROTECTIONS

The Office of Human Research Protections (OHRP) has introduced a new web resource at <http://www.hhs.gov/ohrp/related.html>. Links to historical documents, federal register notices, international documents and Common Rule agencies/departments are included. *Federal Register* notices from 1995-2005 are included as pdf files and links are provided to international documents.

ANNOUNCEMENTS

Call for Papers

The editors of the *Journal of Academic Ethics* are requesting submissions of original research on any aspect of the ethical conduct of research involving human subjects. A special issue will explore the wide range of ethical, research and administrative issues and problems faced by researchers, participants, sponsors and administrators. Papers that address researcher-IRB interaction, informed consent processes, on-going review, conflicts of interest, or other relevant topics are desired. Abstracts should be submitted by May 1, 2006 to Dr. Michael Owen (mowen@brocku.ca).

The first quarterly issues of the *Journal of Empirical Research on Human Research Ethics* (JERHRE) will be published by UC Press in March. JERHRE is the only journal in the field of human research ethics dedicated solely to empirical research. The aim of JERHRE is

“to improve ethical problem solving in human research.” Subscription information is available at <http://www.csueastbay.edu/JERHRE/>.

Student Pugwash USA enables students to think independently about how the development of cutting-edge science and technologies affect society--issues that range from international security to public health, from global warming to the development of U.S. science policy. Student Pugwash USA offers weekly updates on science issues, job and internship opportunities, and resources to help students take socially responsible steps on campus. Sign up at http://www.spusa.org/forms/join_mailing.html.

The Ethics Institute at Dartmouth College is accepting nominations for the 2006 Dorsett Fellowship in applied ethics. The Dorsett Fellowship is awarded to senior faculty with experience in applied ethics, in any discipline. The Fellows are required to present public lectures, participate in select seminars with faculty and students, and to pursue their own research interest. The length of residence is negotiable, up to one term. Contact Aine Donovan, Executive Director, at aine.donovan@dartmouth.edu.

The University of Tennessee, Knoxville is hosting a conference on “Ethics & the Business of Biomedicine” on April 6-8, 2006. The conference will focus on values in relation to the business of medicine, and will cover such topics as ethical issues concerning the pharmaceutical industry, marketing and pricing, the purposes and function of HMO’s, physician practice groups and appropriate standards of care.

Additional conference information is available at <http://web.utk.edu/~philosoph/biomedconf.html>

On December 1-3, 2006 the U.S. Office of Research Integrity will host the 4th Research Conference on Research Integrity. The conference aims to further understanding about way to foster integrity and deter misconduct in research. The conference will take place at the Safety Harbor Resort in Tampa Bay, Florida. Abstracts for papers, posters, panels and working groups are due April 28, 2006. All abstracts must be submitted electronically. Preference will be given to studies that open new research areas, use new research methods or provide new insights into recognized research problems. Additional conference information is available at <http://ori.hhs.gov/research/extra/rcri.html>.

The 12th Annual Conference on Teaching Survival Skills and Ethics is offering travel fellowships. The conference will be held June 11-16, 2006 in Snowmass, Colorado. The conference is designed to prepare faculty and administrators to establish or improve instruction in the responsible conduct of research and in professional development. Conference attendees will receive lecture outlines, ethics cases, student handouts, readings, slides, and a comprehensive bibliography. Attendance is limited to 50 persons. Additional information about the conference is available at <http://www.survival.pitt.edu/events/trainer.asp>.

The Peruvian University Cayetano Heredia will host the “Ethics around the world” conference in Lima, Peru on April 19-20, 2006. The conference is part of a series of ethics conferences around the world sponsored by UNESCO. Topics such as ethics teaching programs and ethics education will be on the agenda, as well as the draft Universal Declaration on Bioethics and Human Rights will be discussed. See conference information at http://portal.unesco.org/shs/en/ev.php-URL_ID=6201&URL_DO=DO_TOPIC&URL_SECTION=201.html.

Support From the Following Societies and Organizations is Gratefully Acknowledged:

American Anthropological Association
American Political Science Association
American Psychological Association
Association for Psychological Science
American Society for Engineering Education
American Sociological Association