

Report to the Patriot Act Steering Committee  
 Working Group on Research Compliance  
 May 12, 2003

Working Group

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## Background

Open communication and the freedom to publicly disseminate the results of one's research are basic principles at the foundation of Berkeley's research enterprise, as well as that of other major research universities. Communication of ideas and the publication of research findings is the mechanism through which science advances, and the freedom to openly share ones research with colleagues and students in laboratories, classrooms, and conferences is a core quality of the community that is our University.

These principles of openness and unfettered dissemination of research are embodied in policy, at both campus and UCOP levels. Hence UC-Berkeley's "Policy Guidelines Governing Openness of the Research Environment and Freedom to Publish," issued in 1985 and reiterated in 1991 state:

The University of California, Berkeley, is committed to maintaining a teaching and research environment that is open for the free exchange of ideas among faculty and students in all forums—classrooms, laboratories, seminars, meetings, and elsewhere. Such an environment contributes to the progress of research in all disciplines. There can be no fundamental limitation on the freedom to publish as the result of accepting extramural research support. . . . Publication restrictions which convey veto or censorship authority to the sponsor are unacceptable.

With respect to access to and participation in University laboratories, UC system-wide policy states: “. . . discrimination in employment based on citizenship is unacceptable.” This policy was amplified in policy guidelines distributed by UCOP in December of 1999: “Consistent with this policy, it is University practice that access to University classrooms, libraries, laboratories, and specialized research facilities is open, without regard to citizenship, residency status, or Visa category. Questions regarding citizenship status may not be asked of those entering such facilities. . .”<sup>1</sup> In keeping with these policies it has been the practice of our campus's Sponsored Projects Office to refuse to accept any extramural contract or grant that contains restrictive language with respect to either publication or employment.

The commitment of the scientific and university community to open communication always exists in tension with obligations to the safety and security of the public, since few would deny that certain kinds of scientific information could be used by those with malevolent designs to do harm on a vast scale, such as by designing biological, chemical, or radiological weapons or developing ways to deliver them. Most of the time this

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<sup>1</sup> See “Memorandum: Unacceptable Controls Based on U.S. Citizenship Status,” Office of the Provost and Senior Vice President—Academic Affairs, University of California, December 15, 1999, p. 2.

tension remains latent and the kind of basic research conducted at universities is considered benign with respect to the security and safety issue. However, at certain times, and under certain circumstances, the latent tension between the principles of open science and public security is transformed into manifest conflict, leading those inside the academic community, as well as those outside it, to consider limits on the open dissemination of scientific information.

The first manifestation of this kind of situation arose in the late 1939, when scientists working on nuclear fission in the U.S. and Europe came to the realization that the creation of an atomic bomb was possible. Concerned that Nazi Germany could use the results of their research to develop such a powerful weapon, scientists in England, France, and the U.S.—the latter including prominent Berkeley physicists— took the extraordinary step of agreeing to voluntarily withhold from publication experimental results and theoretical studies relating to uranium fission and plutonium production. The agreement was formalized in June of 1940, when a committee of the National Academy of Sciences put into effect a system whereby papers dealing with nuclear fission would be reviewed and those deemed “sensitive” would be distributed only to a limited number of researchers. Hence, well before the government imposed secrecy on the activities of the Manhattan Project and before it developed the post-War system of research classification, University-based scientists had, in the face of what they considered a national emergency, agreed to limit the open dissemination of research results.

A decade-and-a-half later, Enrico Fermi recalled his participation in this project of scientific self-censorship: “At that particular time [1939- 1940] with the war impending and critical political situations and so on, I joined with a group of others . . . in a voluntary censorship to keep [secret] certain results that could lead in the direction of the atomic bomb”<sup>2</sup>

In the early 1970s the foci of tension between scientific inquiry and public safety shifted from physics to biology. This time it was scientific advances, specifically in the area of recombinant DNA, rather than external political events, which transformed a latent tension into a manifest conflict. Concerns about the hazards of rDNA experiments within both scientific and government circles led to a flurry of activity focused on the need for regulation of research in molecular biology. Distinguished scientists published letters in Science and Nature calling for rDNA experiments to be temporarily halted. The NIH established a Recombinant DNA advisory committee (RAC) to consider necessary regulation of “bio-hazards.” In 1975 a major international conference of molecular biologists was held at Asilomar to consider imposing controls on future rDNA research. In the end, the hazards presented by rDNA research were considered less severe and the control measures introduced were less extensive than at first envisioned. However, the rDNA debates of the 1970s do illustrate how legitimate concerns for the safety of the public can come to challenge the principle of open scientific inquiry.

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<sup>2</sup> testimony in the 1954 Oppenheimer hearings, quoted in Arvin S. Quist, Security Classification of Information, Chapter 4, p. 2.

The terrorist attacks of September 11, 2001 and the subsequent distribution of weaponized anthrax through the U.S. mail have once again made manifest the tension between science, on the one hand, and public safety and security, on the other. Once again, as in the 1940s, political events have triggered concerns that unfettered science could be used to do great harm. Two aspects are at issue in the current period: 1) the concern that the materials utilized in some biological and bio-medical research laboratories—toxins, pathogens, poisons, and the like—could be obtained by individuals or groups intent on developing weapons for acts of terrorism; 2) the concern that the results of research intended to develop counter-measures against terrorist threats could be used by terrorists to foil those very counter-measures.

Once again, as with the rDNA debates of the 1970s, the scientific community while remaining highly skeptical about the efficacy of government regulation has recognized the legitimacy of the public safety/national security concerns. In February 2003, the editors of more than thirty academic journals in the biological sciences issued a statement calling for self-imposed limits on the publication of research results where “the potential harm of publication outweighs the potential societal benefits.” In such instances, the statement continued, “the paper should be modified, or not be published.” The preamble to the editors’ statement set forth the dilemma created by the science-security tension in the post 9/11 environment.

New discoveries reported in research papers have helped improve the human condition in myriad ways . . . But new science . . . may sometimes have costs as well as benefits. The events of September 11 . . . and the subsequent harmful use of infectious agents brought a new set of issues to the life sciences. As a result, questions have been asked by the scientists themselves and by some political leaders about the possibility that new information published in research journals might give aid to those with malevolent ends. . . . Fundamental is a view . . . that there is information that, although we cannot now capture it with lists or definitions, presents enough risk of use by terrorists that it should not be published. How and by what processes it might be identified will continue to challenge us, because . . . it is also true that open publication brings benefits not only to public health but also to efforts to combat terrorism.<sup>3</sup>

The editors’ statement, to which there has been considerable dissent, was published in the Proceedings of the National Academy of Sciences, Nature, and, with the Editor-in-Chief’s endorsement, in Science.

The science/security relationship represents two dimensions of the dilemma facing the University community in the wake of 9/11 and the ensuing “war on terrorism.” There is

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<sup>3</sup> See David Malakoff, “New U.S. Rules Set the Stage for Tighter Security, Oversight,” Science, December 20, 2002, p. 2304.

a third dimension that further complicates matters-- the University's public service mission. At times of national emergency, the University may possess expertise that can protect the public from harm; and, like their predecessors in the early 1940s, University faculty members may want to put their research to work in the service of protecting the community, even if publication restrictions are imposed on their research. In such instances should the University refuse to permit its faculty to perform this public service role?

Consider this only partially hypothetical example. A faculty member at UC Berkeley is working to microfabricate DNA analysis systems so as to develop chemical and biological microprocessors. Built into a hand-held device such microprocessors could, potentially, detect small amounts of an array of chemical, biological, and radiological substances. If successfully fabricated, this technology would be of immense value in protecting the public at airports, seaports, and other nodes where those with malevolent intent may be moving dangerous substances into the U.S. to be used in terrorist attacks. Since the 9/11 events the faculty member no longer posts his research papers on the internet out of concern that knowledge of the technology he is developing would allow terrorists to develop counter-measures in order to avoid detection. For several years this research has received government funding without any publication restrictions, and the researcher is close to achieving his goal of fabricating a microprocessor that can detect multiple chemical and biological agents. In 2003, the Government, recognizing the technology's great potential in counter-terrorism efforts, increases the amount of research funding available to the Berkeley professor, but this time places restrictions on the publication of his research results. Without this government funding this promising project is unlikely to reach fruition and the professor wishes to continue the research even under the restrictive conditions. Should the campus, standing on the principle of open and unrestricted dissemination of research, refuse to accept the research funds, and thus deny to the public a significant measure of protection against terrorist attack?

The above examples are not presented as an endorsement of any past actions taken with respect to the science-security tension. Rather, they have been used first, to demonstrate that the policy dilemma created by the tension is not new, but recurring. And second, to illustrate the moral and practical complexities facing us in the post-9/11 environment as we attempt to manage this tension in a manner that preserves our University's research enterprise and protects our academic freedom.

University of California policies recognize this inherent tension between research/science, on the one hand, and security, on the other. The policies that forbid restricted access to University facilities and proscribe publication restrictions by research sponsors recognize an exception in matters of national security and public safety. Hence, the UCOP's Contract and Grant Manual stipulates that Chancellors can make exceptions to the policy prohibiting restrictions on the freedom to disseminate research results **when "security considerations in the national interest are involved," or when "special or extraordinary circumstances prevail . . ."**<sup>4</sup> The policy that precludes discrimination in

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<sup>4</sup> University Contract and Grant Manual, 1-410 *POLICY*. [emphasis added]

access to facilities on the basis of citizenship, national origin, or ancestry, allows for exceptions to be granted by the Chancellor, with Presidential approval, **“in select cases where there are compelling circumstances in support of legitimate public interest.”**<sup>5</sup>

## **The Post 9/11 Environment**

The events of Fall 2001, and the “war on (and defense against) terrorism” launched in their wake, have altered the landscape for research at U.S. universities. Driven by a concern that research-generated information, and materials used in research experiments, could be used by terrorists to attack the American population, the Federal government has extended its regulation of research activities at Universities and private laboratories. The effects of this new regulatory regime will be felt especially by the biological sciences, and some branches of chemistry, computer science, and physics. At present, the likely direct impact of the emerging regulatory environment will be in two areas: 1) new regulations with respect to how certain biological and chemical agents are handled in laboratories, and new restrictions on who may have access to laboratories that contain such agents; and, 2) restrictions written into Federally-funded contracts and grants that place limits on the publication of research results, and that impose citizenship requirements on participation in research programs. University research may also be indirectly impacted by the difficulties foreign graduate students, post-doctoral scholars, and research collaborators confront in gaining timely entry into the United States as a result of a slowdown in the Visa issuing process.

### Access to Laboratories containing “select agents”

Three laws have been introduced since September 11, 2001-- the Public Health Security and Bio-Terrorism Preparedness and Response Act, the Agricultural Bioterrorism Protection Act, and the USA Patriot Act—which, working together, impose regulations on laboratories that possess “select agents” (currently more than 80 pathogens, toxins, and poisons). The basic purpose of this new regulatory regime is to limit access to select agents. In some instances, possession of any amount of the select agent triggers regulation, while in other instances (more numerous) the Centers for Disease Control (CDC) has set quantity thresholds. Laboratories which possess select agents in amounts that fall below these thresholds are exempt from the new regulations. However, for those laboratories whose select agents exceed the thresholds registration with extensive security regulations is required. **Principal Investigators who fail to comply with the elaborate regulations, described below, are subject to both fines and criminal prosecution.**

The new security regulations impose several burdens on the University. The Bioterrorism Protection Act requires rather extensive security procedures to insure against unauthorized access to laboratories that possess select agents, including special

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<sup>5</sup> See Barbara Yoder, “Publication Restrictions, Export Regulations, and Controls on Participation of Foreign Nationals in University Research: A White Paper, Office of the President, University of California, October 9, 2002, pp. 6-7 [emphasis added]

secured facilities in which the select agents are stored and used. The construction and maintenance of such facilities is likely to impose a significant financial burden. One estimate puts the cost at \$700,000 per laboratory.<sup>6</sup> In addition, there are the personnel costs involved in monitoring compliance with security procedures.

Beyond the financial burden, these new laws raise several barriers to access to laboratories in which select agents are used and/or stored. First, institutions are responsible for ensuring that only individuals with a demonstrated legitimate need for access are permitted into such laboratories. Second, any individual who will have access to select agents must register with the Department of Health and Human Services. Third, the registration process involves completing an FBI questionnaire and successfully passing an FBI security risk assessment. Fourth, the Patriot Act requires the institution to deny laboratory access to individuals who fail to “pass” the risk assessment— termed “restricted persons.” Fifth, the Patriot Act lists 8 categories of people who are automatically considered “restricted” and thus barred from access to select agents and the laboratories in which they are housed:

- anyone who is under indictment for a criminal offense that could carry a prison term of over one year.
- anyone who has been convicted of a crime punishable by a prison term exceeding one year.
- anyone who is a fugitive from justice
- anyone who is an illegal alien
- anyone who had been committed to any mental institution
- anyone who is “an illegal user of a controlled substance”
- anyone who has been dishonorably discharged from the military
- any alien who is a citizen of a country designated by the Secretary of State as providing support to international terrorism (currently there are seven such designated countries—Cuba, Iran, Iraq, Libya, Sudan, North Korea, and Syria).

The last of these eight classes of “restricted persons” is most troublesome with respect to University policy since that policy prohibits discrimination based on citizenship in determining access to University facilities, including laboratories. It would appear that **unless an exception to this prohibition is granted by the UC President, current policy would forbid research on the Berkeley campus that utilizes any of the substances on the CDC’s select agent list, unless the amounts utilized fall below the CDC’s quantity threshold.**

At the moment, the impact of the select agent regulations on Berkeley’s research enterprise is nil, since we currently have no campus laboratories that are using any of the select agents in sufficient quantity to warrant HHS registration. However, this could change should the CDC alter its select agent list by either adding substances or by lowering the quantity thresholds. A small change in the latter could have a big impact on campus research, since many of our biological laboratories use substances on the select

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<sup>6</sup> See Genevieve J. Knezo, “Sensitive But Unclassified” and Other Federal Security Control on Scientific and Technical Information,” Report to Congress, Congressional Research Service, April 2, 2003, p. 9.

agent list but in quantities that are below the CDC's current thresholds. There is no indication that such changes in the select agent list are presently being contemplated. At the same time, one can imagine a not entirely implausible scenario within which the Government would significantly expand the regulation of dangerous substances—a major bio-terrorist attack on the U.S., for example.

#### Restrictions in Federal contracts and grants

Since 9/11 there has been a great deal of concern voiced in the academic community that Federal agency awards for research on subjects viewed as relevant to terrorism will contain clauses that restrict the dissemination of research results. Another concern, although less frequently discussed, is that federal grants will come with restrictions on the hiring of, or collaboration with, foreign nationals. Unlike the regulations governing the use of select agents, these types of restrictions have not been required by recent legislation, but rather would emerge from the internal policy and implementation decisions of the various Federal Government agencies that sponsor university-based research. Of particular concern is that Government agencies will write into the terms of their grants and contracts clauses that allow for pre-publication review and for the withholding from publication of material the agencies consider to be “sensitive but unclassified.” The fact that the “sensitive but unclassified” designation is ill-defined and elastic has heightened concerns. Another major troubling element is that by accepting sponsored research that contains publication restrictions a university could trigger export control regulations. These require an export license for the dissemination of technology that may have a military or dual military/civilian use. Without such a license the technology can not be transferred (i.e., published, discussed, presented) to any person who is not a U.S. citizen. Export control laws possess an exclusion for “fundamental research” under which university research, except in very special areas, has been exempt from export control regulations. Unfortunately, these laws define “fundamental research” as research “where the resulting information is ordinarily published and shared broadly with the scientific community . . .”<sup>7</sup> Hence, should publication restrictions be imposed because the research is considered “sensitive” that research might no longer qualify for the exclusion. If that were the case, not only would dissemination by publication be restricted but so would any communication of the research to non-citizens (in classes, seminars, conferences, etc.).

As of this moment, a new regime of publication regulation based on the “sensitive but unclassified” designation has not emerged. Rather, there has been a great deal of talk both inside government agencies and among university and academic associations that such a regime is in the offing. This “talk” has been occurring at the same time as high level Bush Administration officials—National Security Advisor Rice, Science Advisor Marburger, and Homeland Security Secretary Ridge—have each sought to reassure the academic community of the administration's commitment to openness in basic science and have asserted that “classification” is the only means for restricting publication. They have reaffirmed that Government policy continues to be guided by NSDD 189 of

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<sup>7</sup> Dana Shea, “Balancing Scientific Publication and National Security Concerns: Issues for Congress,” Congressional Research Service, Library of Congress, January 10, 2003.

September 21, 1985, which states: “No restrictions may be placed upon the conduct or reporting of federally-funded fundamental research that has not received national security classification.”

These assurances, notwithstanding, skepticism appears to be the order of the day. The belief in the academic community that an environment of increased publication restriction will shortly be imposed continues to be widespread. Several things can be identified which sustain this belief. For one, it is far from clear that second and third level functionaries in the federal funding agencies have gotten the same message that the high level officials are sending to the university and academic associations. For another, the Homeland Security Act of 2002 appears to send a rather different message. Section 892 of that Act instructs the President to develop procedures whereby federal agencies “identify and safeguard homeland security information that is sensitive but unclassified.” Even prior to the passage of that Act, the White House Office of Homeland Security had asked the Office of Management and Budget to develop new policy guidance for dealing with information that is “sensitive but unclassified.”<sup>8</sup> Concerns were also heightened when Federal agencies, on orders from the White House, purged from their web sites information deemed to be “sensitive but unclassified.” Finally, it could be noted that NSDD 189, which officials insist governs the administration’s thinking, is not itself entirely reassuring. Its commitment to unrestricted research and to classification as the sole mechanism of control is qualified by the phrase “to the maximum extent possible.” One could also point out that the reliance by administration officials on classification as the only means to limit publication is not necessarily reassuring since it does not preclude an outcome far worse than the use of the “sensitive but unclassified” designation—i.e., the expansion of classification controls to cover new areas of research that are deemed relevant for homeland security. Given other related actions by the administration, such a concern should be considered neither fanciful nor paranoid. In December of 2001, President Bush added the Secretaries of Health and Human Services and Agriculture, and the Administrator of the EPA, to the group of officials with “classification authority.” Then, on March 25, 2003, the President issued a new Executive Order on classification, amending earlier such Orders by adding a new clause permitting classification of “scientific, technological, or economic matters relating to the national security, **which includes defense against transnational terrorism.**” [Executive Order 13292, section 1.4 (e)] [emphasis added]

To date our campus has not been confronted with homeland security-related federal contracts or grants requiring pre-publication reviews, restrictions on publication, or prohibitions on the hiring of persons of particular nationalities. Hence, at the moment, we have not been directly impacted by a new post-9/11 governmentally-shaped research environment. That environment, however, is a fluid and dynamic one. There are several factors present that could move us to a situation in which the campus is presented with any number of research grants and/or contracts that have publication or other “security-related” restrictions. Among such factors are:

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<sup>8</sup> Tony De Crapeo, “Scientific Openness and National Security,” NCURA Newsletter, Vol. XXXIV, No. 4, September/October 2002, p. 3.

- 1) Federal agencies that make grants to academic researchers have been involved in a two year process to develop guidelines for homeland security-sensitive research. They may shortly move from developing to implementing those guidelines.
- 2) Once the newly established Department of Homeland Security is in place there will exist hundreds, if not thousands, of DHS employees whose primary responsibility will be to worry about and control information, including research information, which might be helpful to terrorists. It seems likely that once the Department achieves traction its influence will be felt in the Federal agencies that award research contracts and grants, increasing the likelihood that the research environment will become more restrictive.
- 3) Very significant new federal funding will soon be available for homeland security. It is possible that this funding may be made available without restrictions. However, given the source of the funding and the subject matter of the funded research, it is reasonable to anticipate that a significant portion of the new homeland security grants and contracts will come with some type of restrictions

The R& D budget for the Department of Homeland Security (DHS) which is approximately \$700 million in FY2003 will increase to \$1billion in FY2004.<sup>9</sup> Beginning in FY2004, a new agency called the Homeland Security Advanced Research Projects Agency (HSARPA), housed within the DHS, will have an annual budget starting at \$350 million. Support for research in bio-terrorism defense will remain at NIH, but with DHS having a priority-setting role. This bio-terror defense effort will have a budget of \$1.6 billion. Some of these funds will be shifted from other NIH research areas, indicating that some funding in areas traditionally supported by NIH will shrink. The following is a breakdown of the DHS research priorities as they are currently understood:

- Biological countermeasures (\$365 million)
- Nuclear/radiological countermeasures (\$137 million)
- Threat/vulnerability assessments, especially for IT security (\$90 million)
- Chemical/explosive countermeasures (\$65 million)
- University research on emerging threats (\$62 million)

Although we have not looked at the matter systematically, the Berkeley faculty members we have spoken with show little interest in pursuing research grants that contain restrictive clauses. That may very well continue to be the case regardless of the funding situation. However, with the level of funding that will soon become available, it is possible that some Berkeley faculty will become interested in accessing the homeland security R & D money, even if it requires accepting various restrictions.

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<sup>9</sup> source of budget information: website of the American Association for the Advancement of Science (AAAS), "Department of Homeland Security Opens Doors," March 4, 2003, (<http://www/aaas.org/spp/rd/dhs04p.pdf>)

Note that a number of Berkeley faculty members in several schools and departments have a definite interest in homeland security research, including cyber-security (EECS), policy issues (Public Policy and Political Science), emergency services and first responders (Public Health).<sup>10</sup> Several of these individuals are engaged in an informal discussion about putting forward a proposal to obtain one of the homeland security institutes that it is expected will be created by DHS (with price tags in the \$25 million per year range).

Note also, that UCOP has convened a special “Working Group on Homeland Security.” The concept for this group is spelled out in a March 10, 2003 memorandum entitled “A University of California Response to Supporting the Needs of the Department of Homeland Security and Other Agencies.” The clear objective of this initiative is to have some of the newly funded homeland security research done at the University of California.

4) If there is another major terrorist attack on the order of 9/11, particularly if it involves biological, chemical, or radiological weapons, the landscape for research will be torn up and all inhibitions on imposing control and secrecy will probably disappear. A national emergency will ensue and the University with its technical and scientific expertise will probably be called upon to help respond, even if it means sacrificing some of its traditional commitment to openness. It would be politically untenable for Berkeley to refuse to help out in such a situation. This is, of course, a worst-case scenario, but many informed observers consider another terrorist attack on the United States to be “a matter when, not if.”

The research regulatory environment with respect to restrictions in federally funded contracts and grants is currently in flux. While the kind of factors discussed above increase the likelihood of greater government regulation and intrusion, there are other factors that push in the opposite direction. The academic community through its national associations such as the AAAS has been lobbying in favor of continued unrestricted university research and there is some evidence that they are being heard by the Government. The Government, itself, may conclude that the threat to scientific advancement posed by restrictions on research communication outweighs any realistic threat that such communications poses to national security. It is impossible at this time to pinpoint precisely how the research environment will evolve; to predict the extent of restrictions, their exact nature, the areas of research that will be most impacted, and the circumstances in regard to which they will be applied. Consequently, what is needed is a policy framework that allows maximum flexibility and adaptability.

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<sup>10</sup> Two faculty members in MCB are working on anthrax. Beyond this, at the moment, there appears to be little interest in bio-terror defense research in MCB, but given the amount of money that will become available the possibility that this could change can not be dismissed.

## Recommendations

### ***1) Establish a Joint Academic Senate-Administration “Research Exceptions” Committee:***

The environment of research regulation by the Federal Government in matters relating to post-9/11 homeland security is in flux. The emergent environment could well be dramatically influenced by events whose scope, timing, and consequences cannot be accurately predicted. Hence, it makes little sense to adopt a research policy now that could well be rendered obsolete by the rapidly changing reality that that policy needs to engage. What is required is a policy that allows for adaptation in the face of change.

In our view, current policies have sufficient flexibility to do just that. The default position of these policies is that, all things being equal, the campus will not conduct research or accept grants and contracts that limit the dissemination of research results or restrict access to our facilities to whole categories of individuals. However, exceptions can be made in light of the needs of public safety, national security, and the University’s public service mission. The difficult thing is rendering a judgment with respect to the trade-off between the default position, a commitment to openness, on the one hand, and our obligations with respect to safety and security, on the other. In order to adequately make such a judgment, the nature, quality, and importance of each research project needs to be evaluated in light of the security and safety concerns that are current at the time. What is needed in our view is a mechanism that can render such an evaluation in a timely and nimble fashion.

**We recommend the establishment of a small Administration-Academic Senate standing committee that will analyze any research that requires an exception to the openness principle and make a recommendation to the Chancellor as to whether such an exception should be granted.** The current Conflict of Interest Committee (aka the Committee on Positive Disclosure) is a model for this new committee. Henceforth, any contract or grant that contains clauses restricting the dissemination of information or limiting the types of individuals who are permitted to work on the research, would be passed on from SPO to the “Research Exceptions Committee” for determination. Likewise, the Office of Environment, Health, and Safety (EH&S) would forward to the committee any requests to conduct research on regulated select agents. In either instance the Committee’s decision would be advisory to the Chancellor, who has the authority to make the final decision, or, in the case of laboratory access, make a recommendation to the President of the University of California.

### ***2) Maintain Prohibition on Classified Research Conducted on the Berkeley Campus***

Although we would not want to place formal limits on the advisory role of the “Research Exceptions Committee” whose creation we are recommending, we would urge that committee to “draw the line” at “classified research.” The kind of elaborate system of control and secrecy that must be implemented for research with a “national security

classification” is, in our opinion, incompatible with a university community. Therefore, we think that classified research should not be performed on-campus. Those faculty members who wish to conduct classified research should be encouraged to do so at off-campus sites that maintain classified facilities, such as the Lawrence Livermore National Laboratory.

### ***3) Establish task force for feasibility exploration of off-campus research facility***

Create an ad hoc task force to explore the advisability and feasibility of establishing an off-campus location at which restricted research (and perhaps classified research) could be conducted. Some major research universities maintain a policy of non-restricted research on their core campuses while maintaining separate but close-by facilities where such research can be conducted. Thus, MIT’s Lincoln Laboratory, at which classified research is done by MIT faculty, is located about 30 minutes by shuttle bus from the University’s Cambridge campus. SRI in Menlo Park, which Stanford University spun-off as an independent entity in 1970, serves the same function for Stanford faculty members.

Several members of the Berkeley faculty have urged the campus to consider establishing a homeland security research facility either in rental space or in currently underutilized off-campus University properties, such as the Richmond Field Station and 6701 San Pablo Avenue. Discussion of such a facility’s feasibility has particular relevance with respect to the desire, in some quarters, to compete for major funding from the Department of Homeland Security.

### ***4) Develop a communications strategy***

It is imperative that faculty members understand the new regulatory environment for research and are aware of the severe penalties for non-compliance, including criminal penalties. This is especially true for the biological sciences where work with regulated select agents is a possibility. We recommend the development of both an internal and external communications strategy. In respect to internal communications, our minimum recommendations are the following:

- Deans (particularly the Deans of Biological Science, Physical Science, Engineering, Public Health, and Chemistry) should be tasked with presenting their Chairs with an overview of both the Federal post-9/11 research regulations and our campus policy framework. Chairs, in turn, should be tasked to do likewise with respect to their faculties. The Director of EH& S, the Office of Research Administration and Compliance, as well as the Office of the Vice Chancellor for Research should assist the Deans and Chairs in this task.
- A session on the post-9/11 research environment should be added to the annual Deans and Chairs retreat.

- Relevant campus unit websites (especially EH & S, SPO. and VCRO) should be updated with the new regulations with respect to select agents, and with the internal policy framework, once one is developed.

As regards an external communications strategy-- It is important that Media Relations is made aware of developments in the research area in the aftermath of 9/11 and of the campus's policy framework with respect to it. The actual development of an external communications strategy, and the decisions about if and when to launch it, should be left to the Director of Media Relations, working with the Chancellor and other actors with responsibility in the research compliance area, such as the Vice Chancellor for Research.

### ***5) Government Lobbying***

The major national associations of universities—the Association of American Universities (AAU), the National Association of State Universities and Land-Grant Colleges (NASULGC), the Council On Governmental Relations (COGR)—have, since 9/11, actively engaged the Government in an effort to shape the emerging regulatory environment so as to preserve the openness that is so essential to university life and scientific progress. We, at Berkeley, should avail ourselves of any opportunity to contribute to that effort.