

Of Patriots and Profits - New Tools for Keeping Academic Research in Line

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A recent FBI investigation of Professor Steven Kurtz and the internationally acclaimed artist collective Critical Art Ensemble (CAE) inspired us to take a closer look at the current administration's use and misuse of the expanded government and law enforcement powers granted by the PATRIOT Act. Since the investigation of Kurtz was initially articulated in the framework of terrorism, we first ask if the Patriot Act was used to enable that investigation. But we want to extend the analysis of this case in particular to consider how the Patriot Act may have an impact on bone fide research conducted within American educational institutions. Under the rubric of biosafety and biodefense, the Patriot Act introduces new regulations applicable to biology labs and the institutions that house them. Are these regulations and their violation actually relevant to the Kurtz case? How much is the government policing scientific research and how does that change the current cultural-scientific landscape of this country? In which way does it differ from already existing governmental-research interrelations provided through funding and employment structures in the academic research sector?

We will use these few pages to assemble the terms needed to understand how the new anti-terrorist legislation works with other forces affecting the direction and practice of scientific research.

The Case

On the morning of May 11 Steve Kurtz, a founding member of CAE, woke up in his home in Buffalo New York, to realize that his wife of 25 years, Hope Kurtz, another founding member, was not breathing. He called the emergency medical team who were unable to revive her. Later it was determined that she had died of heart failure. Because this was an unexpected death of a relatively young woman, the local police came to investigate the scene. In the large hall outside the bedroom they noticed a table laden with scientific equipment in plain view. Like all police in the U.S. the Buffalo police now think 'terrorism' when confronted by something difficult to explain. Kurtz accounted for the equipment telling them that, as an artist, he used it to create educational events in which the public becomes more familiar with commercially applied science. The police searched the house for several hours and then notified the Federal Bureau of Investigation. The next day as Kurtz was leaving home to make funeral arrangements, three carloads of FBI agents pulled up in front of his house and detained him for extended questioning. In shock over the death of his wife, and assuming he had nothing to hide, Kurtz was fully cooperative. His detention lasted 22 hours or until the afternoon of the next day, when finally, by way of cell phone, he was able to get in touch with a lawyer who immediately told him that his detention was not legal and he should walk away. At this moment the FBI also informed him

that he was free to go. But not to go home, because the FBI, working with Homeland Security and the Joint Task Force on Terrorism closed Kurtz's street with police cars, fire engines and medical emergency personnel while they sent a team of agents in hazmat suits in to search the house for biohazards.

Five days later Kurtz was able to return to his house, it having been determined that nothing there was dangerous or illegal. Nevertheless, the FBI had confiscated his scientific equipment, his computers, his notes, a shelf of books on science, epidemiology and the history of biowarfare, his passport and other personal documents, and Hope's body. So far, only Hope's body has been returned.

In the meantime the investigators would have been able to find scores of public sources, in print and on the web, on the work of Critical Art Ensemble: This is a 17-year-old collective of artists of various specializations dedicated to exploring the intersections between art, technology, radical politics and critical theory. Over the past seven years CAE has developed a body of work addressing the politics of biotechnology. CAE's work manifests itself in the form of book projects, installations, public performances and direct action projects. As part of their performance and installation work, the collective often uses the materials of science itself, including laboratory equipment and wetware (bacteria) to address issues that arise around the commercial application of developments in the life sciences. Those materials have included transgenic forms of e-coli bacteria, a cryo tank for keeping DNA samples frozen, and an entire mobile DNA extraction laboratory. In these projects, CAE promotes hands-on experience with the materials of science as a way to demystify scientific research, process and its related politics. Usually this kind of knowledge/experience is reserved for the expert community and takes place behind laboratory doors closed to the public. Having little educational tools in this area the general public has to rely on the media as their only source of information with respect to biotechnology, a field rapidly transforming our lives. CAE wishes to open the laboratory doors in order to provide non-specialists with a sense of agency in regard to the life sciences and stimulate an informed public debate surrounding issues related to contemporary molecular biology.¹

For instance, the project called "Free Range Grains," includes a complete DNA extraction laboratory equipped to test food products for the presence of genetically modified organisms. In public places like cultural centers or museums, CAE set up the lab to test common brand-name foods like corn flakes or corn chips. Audiences could see the whole process, talk to the artists while they worked and learn about the issues surrounding genetically modified food.

Apparently the long history and public visibility of CAE's work did nothing to convince the FBI and the Justice Department that Steve Kurtz is a responsible

artist with a highly credited professional track record and no intent to harm the public. Within barely a week, two members and collaborators of CAE were served with federal subpoenas while preparing an art exhibition at the Museum of Contemporary Art in Massachusetts. The artists were ordered to appear in front of a Federal Grand Jury investigating Kurtz on possible violations of the Biological Weapons Statute (H.R. 3162), which had been expanded by the USA Patriot Act of 2001.

Over the course of the next month, eight more individuals known to the authors received subpoenas. These were members and associates of CAE, as well as colleagues and one student of Steve Kurtz. The majority of the subpoenaed subjects exercised their right of the Fifth Amendment since in addition to being witnesses to the case, they were also potential subjects of the investigation. Since Grand Jury proceedings are secret, we have no idea who else has been served court orders or who may have testified. In addition to the individuals, Autonomedia, a mid-sized press based in New York City and the publisher of CAE's five books, received a subpoena to present all correspondence and business documents related to the accused.

Role of the Patriot Act

Prior to October 2001, Federal law prohibited the development, production, transfer or possession of any biological agent, toxin, or delivery system for use as a weapon (18 USC Section 175). The Patriot Act expands the law by now prohibiting possession of a biological agent, toxin, or delivery system "...of a type or in a quantity that, under the circumstances, is not reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose." The lines quoted here are the lines quoted in a text attached to the subpoenas. Penalties for non-compliance include imprisonment up to ten years and large fines.

The Act also creates restrictions on access to certain materials. "Restricted persons" may not possess, ship, or receive any biological agent or toxin that is listed as a "select agent." Select agents include lethal pathogens such as Ebola virus. "Restricted persons," who are now prohibited from having access to select agents, means any individual who:

- (A) is under indictment for a crime punishable by imprisonment for a term exceeding 1 year;
- (B) has been convicted in any court of a crime punishable by imprisonment for a term exceeding 1 year;
- (C) is a fugitive from justice;
- (D) is an unlawful user of any controlled substance (as defined in section 102 of the Controlled Substances Act (21 U.S.C. 802));
- (E) is an alien illegally or unlawfully in the United States;

(F) has been adjudicated as a mental defective or has been committed to any mental institution;

(G) is an alien (other than an alien lawfully admitted for permanent residence) who is a national of Cuba, Iran, Iraq, Libya, North Korea, Sudan or Syria, or any other country to which the Secretary of State, pursuant to applicable law, has made a determination (that remains in effect) that such country has repeatedly provided support for acts of international terrorism; or

(H) has been discharged from the Armed Services of the United States under dishonorable conditions.

This section of the law makes quite clear the terms on which a person may be accused of violation. The justice department could have easily ascertained, without a grand jury investigation, that Steve Kurtz was not a restricted person, nor was he in possession of any select agents. Despite the language attached to the subpoenas, the prosecutor of this case, U.S. Attorney William Hochul, has publicly maintained that the accusations have nothing to do with the Patriot Act. Indeed , this was proven true when, on June 30, he finally secured charges from the Grand Jury investigation. Together with a longtime colleague and collaborator, Dr. Robert Ferrell, Professor of Genetics at the University of Pittsburgh, Kurtz was indicted for 2 counts each of mail fraud and wire fraud. Interestingly the laws on which these charges are based have nothing to do with bioterrorism; they have to do with property. What did Kurtz and Ferrell actually do to earn such charges?

Public Threat, Private Interests

For a new CAE project Ferrell helped Kurtz obtain samples of three harmless bacteria that are commonly used in biology labs. These microbes occur naturally in our environment, but to ensure getting a pure sample, a researcher would buy them from a company like American Type Culture Collection that produces biological samples for research labs and educational institutions. As evidenced by the emails between Kurtz and Ferrell, quoted in the legal documents used to accuse them, Kurtz wanted to be sure the supplies he was getting were as safe as possible, because he knew that some variations on these bacteria are in fact pathogenic. This is especially significant as Hochul, despite Kurtz's documented concern, continues to cast the case as an issue of public safety.

Certain biological samples are regulated because they pose health risks, but all commercially available samples, both the potentially dangerous and the certifiably safe, are regulated as property. University labs enter into agreements with the companies from whom they are buying biological agents, called Material Transfer Agreements or MTA's. At the University or research institution the scientist who is head of the lab signs a contract saying the lab will not share, sell

or give away the materials being transferred. This may get especially sticky when you consider that bacteria reproduce themselves.

When Ferrell used his Pittsburgh University contract with American Type Culture Collection to obtain \$256.00 worth of bacteria samples, which he then mailed to Kurtz, they broke what is essentially an intellectual property contract. The U.S. Attorney maintains that they obtained these materials under the fraudulent representation that they would be used only in Ferrell's lab. In this case wire fraud refers to the use of the Internet and credit to purchase the bacteria; mail fraud refers to the use of the U.S. Postal Service to receive and send the materials.

Mail fraud and wire fraud are federal crimes carrying sentences of 5 years each. Since each of the defendants is charged with two counts of each crime, they are facing the possibility of 20-year sentences. As far as we know this is the first time such charges have been applied to MTA's. These are contractual agreements surrounding the sale and purchase of a material whose reproduction, once it's in the hands of the consumer, is difficult to control. In the established culture of biological research, sharing samples and other materials freely is the norm. By all accounts from scientists, it is part of the cooperative approach to knowledge that until recently has characterized the field. It's about as common as sharing music has become to a generation of listeners. The lawsuits that have resulted from the sharing of recorded music are prosecuted by the industry against the consumer; in this case the government has stepped in to escalate the questionable interpretation of a contract agreement into the very serious federal charges of mail and wire fraud. Neither the American Type Culture Collection, nor either of the employers of the two professors, the University of Pittsburgh and the State University of New York, Buffalo, filed any complaints or concerns regarding the collaborative efforts and resulting exchanges between Robert Ferrell and Critical Art Ensemble. We must look further into the relationship of science and commerce to understand why the government wants to pursue this case.

The MTAs are signed by the head scientist of any given lab but they are handled by Technology Transfer offices, which also handle patents. Technology Transfer refers to the transfer of research results from universities to the commercial sector. The growth of these offices in universities is a small bureaucratic sign of the increasing involvement of private interests in scientific research. This influence is working from inside and outside the scientific community, in the form of patents, which can be obtained on living materials produced or modified in the lab and also on processes. A large part of the growth of these offices is attributable to the Bayh-Dole act of 1980. Constructed as an incentive to national technological advancement, this act made it much easier for scientists themselves to profit from patenting their own research. Increasingly it has also

made it difficult to separate the question of what kind of research scientists actually decide to do, from a question of the money they stand to make.

And the money is potentially very big. The so-called 'life sciences' have become one of the big investment fields of our time with the pharmaceutical industry for several years claiming the top profit-making capacity in the world. Typically what happens is that scientists become partners with investors or venture capitalists and create small start-up companies to develop discoveries into marketable products. The successful ventures from this level grow, they may go public, they may be bought out by a larger corporation. Effectively, scientific research has come to play a substantive role as driver of the economy. What looks like a great opportunity for the scientists to make more money than scientists ever used to expect to make, is also a mechanism for neo-liberal idea of market forces being positioned to control the direction of research at public institutions.

To get an idea of how these forces may affect research in the life sciences, consider the following: According to 2001 UN Development Report, 1,223 new commercial drugs were released worldwide between 1975 and 1996, but only 13 were developed to treat tropical diseases.¹ In other words, drugs aimed at the problems of an impoverished population --and hence a poor market-- are much less likely to command the R&D resources that an affluent market enjoys.

In addition to the pull of patents imagined down the pipeline, more and more research at public institutions is pushed from the front end by funding partnerships with private corporations. The presumption is that these joint ventures are proven by competition and hence the best way to drive scientific progress, good for the scientists and good for society, because they drive the economy. Of course, like the patent system, reliance on such funding shapes the very questions that science sets out to ask. But it also reshapes the way scientists work. Research being done in the interest of commercial development and likely to become patentable or trade secrets, is as jealously guarded as research that becomes military secrets. So the commercialization of science has been transforming the cooperative way that biologists have traditionally worked into a much more tightly controlled, individualistic pursuit.

The most publicly controversial case of corporate funding in a public university was the five-year research deal between plant biologists at UC Berkeley and the biotechnology company Novartis (now part of Syngenta), which expired in November 2003. The deal awarded the members of the plant and microbial biology access to trade secrets, principally in genetics and \$25 million. In return Novartis had the first rights to negotiate licenses on inventions by faculty members who participated in the agreement, even if the work had been financed with federal funds. Given that the agreement was the center of fierce controversy from the beginning, the concrete results were somewhat anti-climactic as no

¹ UNDP, Human Development Report 2001, p. 3.

dramatic discoveries were made during the contract period, and Syngenta did not license a single invention there from.

The deal included money to commission an independent evaluation of the exchange, which was just released in August 2004. Executed by a group of social and natural scientists at Michigan State University the study reports that the agreement became a lightning rod for divisions within the College of Natural Resources, and a new kind of Achilles heel for the credibility of both the department and the University. Relations among faculty members within the college "continue to be a serious problem," the report says. "Such a poor state of collegiality hinders the productive capacity of the college as a whole and the quality of education that it is able to provide."

One of the flashpoints for divisions in the department was the tenure case of Ignacio Chapela, an assistant professor of microbial ecology and an outspoken critic of the deal. The Novartis deal "played a very clear role and an unsatisfactory role in the tenure process" of Mr. Chapela, said Lawrence Busch, a professor of sociology at Michigan State University, who headed the evaluation. More than 200 academics and others have called for an investigation of the tenure denial for Mr. Chapela. As of now the Academic Senate's Committee on Privilege and Tenure is investigating whether he received due process, while his term of employment has been extended to December 31, 2004.

It's hard not to connect Mr. Chapela's extended troubles in the wake of this corporate-academic controversy with the fact that it was Mr. Chapela who, along with graduate student David Quist, discovered transgenic corn growing in Oaxaca, Mexico. The discovery ignited an international conflagration because this area is the seat of genetic diversity for maize, and the planting of GMO corn is not legal in Mexico. The dumping of such corn for human and animal feed on the Mexican market is, however, something that has been occurring for years.

The report does not indicate that the Berkeley Novartis 'Strategic Alliance' as it was called, actually influenced the direction of research at the school. However, in an editorial in the Berkeley Daily Planet, Andrew Paul Gutierrez and Miguel A. Altieri illuminate the dark continent of questions not even considered by the evaluation:

"The report ... assumes at Berkeley that the rise of biotechnology and the fall of applied agricultural fields such as biological control, plant pathology, soils and others is just part of the natural progress of science; a mere part of the process of modernization. In fact, according to the review, the "deal" appears consistent with the universities adjusting to the emerging norms of university-based

economic development" and gives the impression that science at Berkeley is protected from the influence of politics and corporate power."²

Whatever questions are asked, it is generally agreed that the controversy is a symptom of a crisis in the mission of universities nationwide. Of the current possibilities for the university mandate--provide conditions for independent research, create knowledge, educate elites, educate the masses, train specialists for a changing job market, stimulate the economy—the last of these is gaining ground quickly and silently as intellectual property regimes and corporate funding are increasingly normalized. But the post 9/11 high security paradigm is imposing one more priority and reforging an old set of relations between the state, corporations and research institutions. The working and intellectual restrictions that accrue around the life sciences conducted as economic enterprise are being tightened even more by the induction of the life sciences into military service.

Defending Concentrated Capital

Since 2000 in the USA there has been a six-fold increase in annual spending for biodefense. What a lot of this money is going towards is the construction of several new biosafety level 4 labs in different parts of the country. These facilities are built for research into very deadly infectious pathogens and so they are capital-intensive complexes with very high tech security systems that have to be maintained round the clock. All the people working in these labs from the scientists to the janitors have to be highly restricted, their backgrounds checked and their daily routines subject to intense surveillance. In addition, the major public funding opportunities for research in universities are being severely skewed towards biodefense so that labs in educational institutions will also be subject to high security restrictions, affecting the culture of the entire institution, making it more hostile to the free and open sharing of research materials and information.

An earlier case similar to the Kurtz/Ferrell prosecution had already begun to dramatize the possible consequences of researchers who run afoul of regulations or interests powered by the judiciary. Thomas Butler, a leading authority on infectious diseases at Texas Tech University in Austin, TX, called the FBI on January 14th 2003 to report 30 missing vials of plague bacteria from his research laboratory. Under pressure of the agents Butler admitted the following night that he himself had accidentally destroyed the bacteria, a statement that he retracted shortly thereafter. The following FBI investigation examined Butler's life and research activities in all details. Butler was charged with lying to the FBI, smuggling plague bacteria into the country and illegally transporting biological

agents. Butler was acquitted of the former two, but found guilty of the latter. Again it was the transporting of agents that nailed the conviction. Butler's record shows a 30-year career in infectious disease research, often pursued at great personal risk. Drafted by the Navy during the Vietnam War, he treated plague patients overseas. In the early eighties Butler was actively involved in HIV research, at a time when few scientists would dedicate their time and energy to the growing epidemic. Later in the eighties Butler returned to bubonic plague research and engaged in research relationships with hospitals located in Tanzania. The Center for Disease Control, The Food and Drug Administration as well as USAMRIID researches took great interest in his work and offered support.

Since his legal troubles began, letters of protest on Butler's behalf have been publicized by the President of the Infectious Diseases Society of America, the President of the National Academy of Sciences and Institute of Medicine, the New York Academy of Sciences and a group of four Nobel Laureates, to name a few. These statements refer to the deleterious effects of the complex regulations following from the Patriot Act, and the heightened security accompanying escalated biodefense on the practice of science in general. Many of Butler's supporters caution the government that such gross disproportion between mistakes made and punishment wrought is intimidating to scientists and more specifically that it will discourage scientists from working in the area of bioweapons and infectious disease research.

What has gone largely unremarked in the Butler case is the nature of the work he was doing and the program in which he was working at Texas Tech University in Austin. According to a report by the Sunshine Project, Butler was working in a large and secretive biodefense program receiving 70% of its funding from the US Army Soldier Biological Chemical Command (SBCCOM), with other grants provided by the Air Force. The program there "engages in other kinds of research on bioweapons agents and toxins. This includes types of work that have drawn international criticism of the US because they push the envelope of acceptability under the Biological Weapons Convention."³ The report points out that the mishandling of vials of pathogens is not just a threat to public health but a gross political liability to the U.S. internationally.

It so happens that the materials obtained by Dr. Bob Ferrell and shared with Steve Kurtz were acquired for a new CAE project about exactly this issue, a project to raise public discussion about US policy towards biodefense. This is the kind of discussion our government and its corporate backers do not want us to have. A real public debate on this subject should include a number of currently suppressed considerations: According to many analysts, the threat of bioterrorism is actually very unlikely because, from a weapons point of view, with the exception of anthrax, biological agents are unstable, hard to work with and a lot more trouble than explosives and chemical toxins. The problem with an

aggressive biodefense program is that it is essentially indistinguishable from an aggressive bioweapons program. The new biosafety level 4 labs will actually be developing _new_ deadly pathogens in order to figure out how to defend against them; these facilities actually _increase_ the likelihood of previously unknown lethal microbes. In the only bioterrorism scare in the U.S., the anthrax anonymously sent through the mail shortly after 9/11 was traced back to one of the government defense labs studying bioweapons, and three years after that discovery the government still can't locate the perpetrator. As shifts in budgets already demonstrate, biodefense spending comes at the expense of research into common infectious diseases that kill people every day. The ultimate effect of such programs is the militarization of public health and the corporatization of all things military. Not unlike the gains made by Halliburton and other private contractors from U.S. military operations in Iraq, contracts to build and maintain these high security facilities are likely to be lucrative and concentrated among a very few.

What the government would have found in the writings published by CAE is a well-developed critique of this economic system. They also provide guidelines for empowerment of the people and means of resistance against predatory corporate concerns. Nowhere has CAE ever advertised terrorist or any other activities that could be of harm to individuals. The subpoena of Autonomedia's records is just one indication that the government finds CAE's ideas very relevant to this case. This subpoena was made possible through Section 215 of the Patriot Act, which relieves the government of providing probable cause to believe that the person whose records it seeks is involved in any kind of criminal activity. Records of any person living in the US may be requested without providing any reason or justification. Those served with Section 215 orders are prohibited from sharing that information with anyone else. The American Civil Liberties Union points out that these types of requests are likely to be used against persons living in the US who exercise their first amendment rights.^{4 5} Autonomedia's subpoena was "deactivated" towards the end of the grand jury hearings after a letter of complaint was sent by the New York Civil Liberties Union to the prosecuting attorney. It was precisely on the basis of first amendment rights that the NYCLU ultimately discouraged the Justice Department from pursuing the subpoena.

It seems in this case that the license granted to government power, codified in the Patriot Act but taking many forms ultimately legitimated via the public's concern for security, is being used to back up an economic system already in place. In this economic system the power of governments is devoted to protecting the rights of large corporations to develop maximum opportunity for financial reward and minimum responsibility toward the public good. Comparison of a string of judicial abuses under the Bush administration to the McCarthy era is not the only relevant hearkening to cold war mentality. The threat of terrorism has justified the retrenchment of a military industrial complex in which

government and corporate structures collude to concentrate material and human resources in a disciplinary paradigm dedicated to profit and social control. The Patriot Act is only one instrument in this new old order.

¹ For more information regarding Critical Art Ensembles work, please look at:

<http://www.critical-art.net>

² : Some Reflections on the Berkeley-Novartis Report, Berkley Daily Planet, by Andrew Paul Gutierrez and Miguel A. Altieri. August 10, 2004

<http://www.berkeleydailyplanet.com/article.cfm?issue=08-10-04&storyID=19409>

³ The Thomas Butler Case: Some Unreported Information And Reasons for the Department of Justice's Prosecution. The Sunshine Project, News Release, 28 October 2003.

The Thomas Butler Case: Some Unreported Information
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⁴ The ACLU provides excellent background material on title 215 of the patriot act. For more information please see: <http://www.aclu.org>

⁵ A survey conducted at the University of Illinois suggested that only 3 months after September 11th, the FBI had already contacted 85 out of approximately 1500 libraries in this country.