THE UNIVERSITY OF CALIFORNIA
AND THE NUCLEAR WEAPONS LABORATORIES

and

HOW THE UNIVERSITY OF CALIFORNIA
MOVED TO NEW ZEALAND: A FABLE

by

Diana Hull, Ph.D.

Booklet 25
WAGING PEACE SERIES
WAGING PEACE SERIES

As far as is known, the term "Waging Peace" originated with Warren Wells, late husband of Ethel Wells of Santa Barbara, in a letter to President Eisenhower. It was a long-standing practice of Mr. Wells to keep in close touch with key national figures and give them his views on peace issues as well as other vital matters. This series is dedicated both as a memorial to him and in gratitude to Mrs. Wells for her continued efforts in this cause.

Just as peace is more than the absence of war, waging peace is more than supporting arms reductions. In addition, it embraces positive steps toward genuine harmony. In this series the Foundation publishes and distributes short booklets stressing ideas for attaining peace. Concepts expressed will include views of many authorities, and will not necessarily be those of the Foundation.

Suggestions for topics and your reactions to this issue are welcome. Booklets in this series are available from the Nuclear Age Peace Foundation.

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HOW THE UNIVERSITY OF CALIFORNIA
MOVED TO NEW ZEALAND: A FABLE

(The Lawrence Livermore and Los Alamos Laboratories are the only two National Laboratories chartered to design nuclear bombs and conduct nuclear bomb tests. Both laboratories are part of the University of California.)

by
Diana Hull, Ph.D.

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"They took a chemical laser and made a booster rocket explode on TV for the public...there was no X-ray laser weapon when Teller first talked to Reagan about 'Star Wars' five years ago (1983)...and there is none now."
—Roy Woodruff, former Director of Livermore Weapons Program to the Los Angeles Times, July 17, 1988.

"The question of fraud in science is always difficult for the scientific community to deal with. However, when evidence of fraud is discovered involving this nation's most well known scientists, and a multi-billion dollar research and development program at one of this country's national laboratories, and with the apparent acquiescence of that laboratory's director...then a full scale public disclosure...is a requirement. Such is the matter before you today."
WAGING PEACE BOOKLETS

1. Can We Change Our Thinking? by Charles W. Jamison
2. Creating a New Institution: A United States Academy of Peace by Frank K. Kelly
3. Preventing Accidental Nuclear War by David Krieger
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23. Ending the Tyranny of the Arms Race: A Peace Conversion Program by Larry Agran
24. God's Dream by Archbishop Desmond Tutu
25. The University of California and the Nuclear Weapons Laboratories; and How the University of California Moved to New Zealand: A Fable by Diana Hull, Ph.D.

INTRODUCTION

All of the bombs in the nation's nuclear arsenal and their 24 different warheads were invented or designed and developed and tested at the University of California Nuclear Weapons Laboratories. In addition to their “primary assignment,” the laboratories work on conventional weapons systems, on new methods of uranium enrichment for the nuclear power industry, fusion, and various basic research programs. To insure that the United States is first in nuclear weapons technology, the laboratories are now studying improved models of the Lance missile, the tactical air-to-surface missile and the Earth Penetrator. As part of this work, the laboratories conduct nuclear tests, about a dozen in 1989, but in the past as many as 90 per year. The laboratories also develop improved production methods for the fissionable and fusible isotopes used in warheads, and Livermore's Atomic Vapor Laser Isotope Separation process. The products of these laboratories endanger every human being on earth.

If the nuclear devices developed at the University of California Nuclear Weapons Laboratories are ever used by design or accident, the Regents and the Administration would be accomplices in the kind of crimes against humanity successfully prosecuted by the International Military Tribunals at Nuremberg and at the Tokyo War Crimes Trials. Our government was a signatory to the London Charter of 1945, making such crimes punishable under United States law, as well as under international law. The War Crimes Tribunals ruled that the claim of “superior orders” was not a defense. Yet, the University of California uses it to explain their complicity in the creation of nuclear weapons.

The Jendresen Committee of the U. C. Academic Senate recently recommended that the University sever its relationship with the laboratories, and the majority of the faculty voted in agreement.

It is important that you act to support severance because such votes and recommendations are only advisory. The Regents are “sovereign” and without public pressure there is every indication that they will approve another five year contract with the Department of Energy. The vote for preliminary approval will be taken on September 20-21, 1990, at a Regents meeting to be held at UCLA, and the final vote on the details of the contract will be taken in 1992.

Diana Hull, Ph.D.
David Krieger, President
Nuclear Age Peace Foundation
EXPRESS YOUR OPINION

We urge you to express your views immediately to the U.C. Regents and President David Gardner. We also suggest that you write to the State Legislators who are in charge of the University budget, and the major party candidates for governor. The names and addresses appear below. Write, if you believe as we do, that the University must stop "lending the mantle of reason" to the perfection of mass destruction.

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THE UNIVERSITY OF CALIFORNIA
AND THE NUCLEAR WEAPONS LABORATORIES

by Diana Hull, Ph. D.

When the University is challenged with the often asked question, "Why is a teaching and research institution operating two nuclear weapons laboratories?" you get their now familiar two-part answer.

"We do it because the government asks us to."
"We do it as a public service."

When you hear this reply for the first time 'you don't believe your ears' because the disarming simplicity of the response stuns you with its feigned innocence and deliberate misunderstanding of the question. The whole truth is a longer story, neither so pure nor so patriotic, and defies containment in a two-liner.

The University of California and the nuclear brotherhood have a 47 year history of collaboration, going back to the original 1943 U.C. agreement with Robert Oppenheimer and Leslie Groves. The association was to end when World War II was over, but federal money for expensive equipment and staff was the lure for continuing the relationship.

Even though the University denies that it makes money from the labs, there are substantial indirect benefits. About two billion dollars of Department of Energy money is funneled through the University business office for lab operations, and the U.C. retirement system is strengthened by the money it holds for 16 thousand lab employees. The direct benefits include the yearly management allowance which, in 1990, will be raised to 13 million dollars.

A significant portion of the 4.3 million dollar recent increase in this allowance goes towards invention licensing costs and the pursuit of patents as laboratory-developed technology is sold to industry. So, despite denials, there is virtually no limit on the potential monetary benefits to the University from what it calls its "intellectual property rights." After payments to the inventors, all other revenues go to the University of California.¹

Over two million dollars of the management allowance is spent for what the administration calls, "Activities Necessary to Gain Increased Faculty, Student and General Public Support for the University's Management of the Laboratories."² The money devoted to getting and keeping that support over the years demonstrates how difficult it has been to marry the world of scholarship and the world of the military.
Behind the University’s bland response to the difficult question about why it continues its association with the laboratories is a hall of mirrors, further distorting a tripartite relationship of Byzantine complexity.

The University, the laboratories, and the Department of Energy work in a delicate balance of obligations and understandings. The labs and the DOE reinforce each other while the U.C. provides the scholarly cover and avoids seeing or knowing what the others are doing by shifting its gaze to Lake Merritt. In protecting themselves and the tie that binds them, all three entities deceive each other a little and the public a lot, while promoting their own agendas to the detriment of the rest of us and to the cause of peace.

There are constant themes. The selling of “Star Wars” by the laboratories, followed by the selling of “Brilliant Pebbles,” and the continuing interference with nuclear test ban treaties reveal the character of the players and the intricate workings of the trio as ensemble.

The laboratories that the University is supposedly managing are being asked by the government what weapons the government should ask the experts at the laboratories to design. And the weapons experts don’t always wait to be asked. When they want to design a weapon, they ask the government to ask them to design it. If anyone in Congress has other ideas, both the laboratories and the DOE use tax money and the University mandate to persuade government to do what the laboratories want done.

While ignoring these activities, the University, at the same time, makes them credible in exchange for the benefits it receives from multibillion dollar federal contracts and its interest in royalty income.

The President of the University insists he has a role in managing the laboratories because he picks the directors and “evaluates” them every five years. But one of the “understandings” is that his choices must be acceptable to the Department of Energy. So, while the laboratories are actually advising the government, the University is pretending to oversee their activities in accordance with the public service they claim the government has requested of them, a task that they can only perform with the permission of the Department of Energy, which is actually managing the laboratories itself. Welcome to wonderland!

THE TRILLION DOLLAR CONVERSATION

“Star Wars” had the wholesome ring of a science fiction movie and the President of the United States liked the sound of it better than “Mutually Assured Destruction” and so did his millions of fans. It was a vision of a bomb-pumped X-ray laser capable of wiping out the entire Soviet missile fleet in a spectacular blast of 100,000 beams of radiation moving across space at the speed of light.

In the fall of 1982, as Edward Teller described to Ronald Reagan this version of what the X-Ray laser could do, it was grandstanding by the country’s most politicized weapons scientist. When he sold this program in Washington, he got his way once again thanks to his position as the darling of the Cold War Hawks and the nuclear weapons industry.

He was also a trophy of the University of California, which cozed up to the eminent of any stripe, while they continued to explain, as they had so many times before, that they were only lending their prestige and blessing to the Lawrence Livermore and Los Alamos Nuclear Weapons Laboratories as a patriotic duty.

Teller was promoting new and untried science without much fear of contradiction, and he didn’t have the slightest hesitancy about crossing the line that separates technical opinion from policy guidance, or optimism from wishful thinking.

In December, 1983, Teller wrote to George Keyworth, Science Advisor to the President, that he wanted to “try and prevent in any possible forthcoming agreement with the Soviets... limitations that might impede our [weapons] work.”

And in December, 1984, he wrote to Ambassador Paul Nitze, Chief Arms Control Negotiator, Department of State:

“This advance [the X-ray laser] is thus comparable in magnitude to that involved in moving from chemical to nuclear explosives. The overall military effectiveness of X-ray lasers relative to the hydrogen bombs which energize them may thus be as large as a trillion, when directed at sharply defined targets. For instance a single X-ray module the size of an executive desk...could potentially shoot down the entire Soviet land-based missile force if it were to be launched into the module’s field of view.”

Both letters were written on the stationery of the Lawrence Livermore National Laboratory and were classified until 1988.

As the trillion dollar conversation took place, the safeguards protecting the nation from self-serving interpretations of weapons research were no longer working as intended. The national science advisory function had been co-opted by the weapons laboratories themselves, and the University of California continued its policy of non-feasance of its laboratory oversight responsibilities.
No independent scientific panel evaluated SDI until 1987. When President Reagan consented, for 280 million Americans, to the most costly military undertaking ever contemplated, there were no controls in place to assure that he was properly informed. We know now that he was badly misinformed.

As a result Americans were going to swallow the costs and risks of Star Wars. They had vastly more protection from false claims and dangerous technology when they considered gall bladder surgery or were offered a new blood pressure pill.\(^5\)

The one trillion dollars would pay for a flotilla of 200 platforms weighing ten tons each, carrying laser generators, optical systems, power supplies, and tracking and targeting apparatus. Supposedly, sensors would be capable of firing laser or particle beams at any Soviet missile right after launch, and the aiming mechanism of the laser would be guided by the flames in the rocket’s exhaust.

When this complex of orbiting space stations was found to be vulnerable to attack, the alternative was to have the X-ray laser “pop up” from a submarine when needed.

Other schemes to stop missiles in space were a rail gun hurling solid projectiles, and the building of giant landbased lasers to radiate beams through the atmosphere toward gigantic mirrors in geosynchronous orbit. The mirrors would then reflect the beams to other orbiting mirrors, which then directed them to the missiles. The beams would have to travel 50,000 miles and be powerful enough to compensate for disturbances in the atmosphere. The problem was they wouldn’t work in cloudy weather.

The X-ray laser was first suggested because it was not practical to have mammoth tanks of compressed gases mounted on space platforms to supply the required 100 million joules of absorbed energy. So, a nuclear explosion of about 120 kilotons was envisioned that would cause X-rays to follow down a metal rod and emerge as a powerful laser beam.

Another type of reactor, suggested as a power source for space stations, would use uranium nitrate and operate at red heat, 2000 degrees F. But this kind of station would emit infrared radiation, making it a beacon and very vulnerable.

Even if all these problems could be solved, hitting a target in space is like hitting a thimble moving at more than four miles per second from 15 to 30 miles away. Creating the software for such a system presents a towering, perhaps insurmountable obstacle, and it would take decades to produce the necessary ten million to one hundred million lines of error-free programming.

Even if this could be done, once incoming missiles were actually hit, they could generate an electromagnetic pulse if they exploded, or spew deadly plutonium oxide into the atmosphere if they burned.

Then, after spending the one trillion dollars for a defense in space, the country could be destroyed by nuclear warheads dropped by an airplane or lobbed from a submarine.\(^6\)

In 1987, 98% of the members of the National Academy of Sciences agreed that SDI could not protect the United States. After looking at the SDI proposals and classified documents, a blue ribbon panel of scientists from the American Physical Society concluded, in a 400 page report, that “Star Wars” was not feasible, and that such a defense could not be built now or in the foreseeable future.\(^7\)

According to Debra Blum in the July/August 1988 Bulletin of the Atomic Scientists, after Robert Park, the President of the American Physical Society, expressed dismay about the caliber of the University’s “stewardship” of Livermore, President Gardner was angry at the impact on the University’s reputation. Vice President Frazer said Teller’s letters contained “no outright lies,” and were just very “optimistic” about the X-ray laser. He claimed that the whole controversy just proved that the University protects differences of opinion. University spokesman Ron Kolb declared that the big mistake was to allow a “public relations disaster to develop.” To all of them, the substantive issues were opaque.

SCIENCE ADVICE TO THE PRESIDENT

Why didn’t the U.S. President hear from an elite scientific panel, representing a wide range of expert opinion, about the problems as well as the merits of this new defensive weapon? Without such a balanced briefing how could he, or members of Congress, be truly informed about this or any other technical issue?

But, instead of getting the broadest possible view, Reagan got the narrowest. His scientific advisor, George Keyworth, was recommended for the post by Edward Teller himself, and was Teller’s former associate.

In December, 1985, Keyworth resigned after he had been accused of being a cheerleader and a spearcarrier for defense programs and for SDI. G. Allen Greb’s research paper, “Science Advice to Presidents,” claims that Keyworth conceded that he did not see himself, or the White House Science Council, as other than a tool of the administration and their policies. And, Greb’s research confirms that SDI was not submitted to other technical experts either outside or inside the bureaucracy.\(^8\)
So, the promoters of SDI managed to have their own man guarding the palace gates and a prestigious academic system was more interested in its “image” than in keeping weapons research honest. When Roy Woodruff, an Associate Director of Livermore, objected to the exaggerated claims Edward Teller made to Ronald Reagan, the University avoided dealing with his complaints and permitted the lab director to isolate him.  

The promoters of Star Wars must have known that safeguards were virtually non-existent and that there wasn’t a soul to whom they would have to answer. Unlike the surgeon or the pharmaceutical company, they had zero liability if their recommendations resulted in failure or even catastrophe.

The recommendations of the U.C. weapons laboratories for SDI and its massive new expenditures were part of a continuing pattern of control the laboratories had established over many years for the purpose of guiding U.S. defense strategy and foreign policy for their own purposes.

For example, the proposed space-based testing of kinetic kill interceptors required a reinterpretation of the ABM treaty which, for 13 years from 1972 to 1985, had precluded such testing. To make Star Wars happen, Reagan insisted on changing the meaning of the agreement in a move the Senate Committee on Foreign Relations called “the most flagrant abuse of the Constitution’s treaty power in 100 years of American history. It was all done to ‘clear the way’ for the weapon makers at Livermore.”

With the same self-serving persistence, the labs have fought a nuclear test ban for decades. They have used their specialized knowledge and access to official Washington to fuel the arms race, and taken advantage of the “secret” nature of weapons work to thwart the democratic process. Of all the special interests groups that stalk capitol decision makers, they are among the most arrogant and the most malignant.

Even Herbert York, the consummate nuclear weapons “insider,” admits in his 1987 book, *Making Weapons, Talking Peace*, that weapons work was self-perpetuating, made a political solution more difficult, and could exterminate civilization. York was a Director of the Lawrence Livermore Laboratory, an ambassador negotiating a Comprehensive Test Ban Treaty in 1979, Director of Defense Research at the Pentagon, and has held many other posts in the academic and defense establishments.

It wasn’t until October, 1987, that the misrepresentations by Teller and Wood became national news. It was four years after Ronald Reagan’s famous March, 1983 SDI speech in which he talked about a space shield that would make nuclear weapons obsolete, a claim based entirely on the alleged technological breakthroughs described to him so glowingly in 1982.

It was a story, as much about the University of California as it was about the X-ray laser and Roy Woodruff, who was directly in charge of the X-ray laser program. It was a story of the struggle to get the truth about the laser to government officials, and the obstacles Woodruff encountered and the punishments he was subjected to by a University just pretending to oversee the weapons laboratories.

The extent of that oversight was the employment of just one U.C.-lab liaison person (there are now three), with an office on the Berkeley campus, and a review of the laboratory directors every five years by the University President. Both of these functions are window dressing. The University has no authority over either the program or the budget of the laboratories, and no inclination to exert any influence on their operations.

Thus, it is unclear what “public service” is performed by the University since the record does not support the contention that they protect the scientific integrity of weapons research.

The four years of conflict within Livermore over the feasibility of “Star Wars” finally came to light, not because the University was doing its oversight job, but because a series of confidential documents were sent anonymously to the Southern California Federation of Scientists (SCFS).

SCFS members were outraged by what this material revealed, and their co-chair, Robert N. Nelson, an astrophysicist at the Jet Propulsion Laboratory in Pasadena, California, called a press conference. He said, "When evidence of fraud is discovered involving this nation’s most well known scientists, and a multi-billion dollar research and development program at one of the country’s national laboratories, and with the full acquiescence of that laboratory’s director...then a full scale public disclosure is a requirement.”

The story that emerged was that as soon as Woodruff saw Teller’s correspondence with George Keyworth and Reagan in 1983, he insisted that it was “wildly premature” to claim that the X-ray laser was “now entering the engineering phase.” But, Teller refused to amend his letters, and, in Woodruff’s words, “Livermore Director Lawrence Batzell refused to transmit correcting technical information or permit me to do so.”

Woodruff was not alone in his criticisms. Donald Kerr, then Director of Los Alamos, reportedly accused Livermore Director Batzell of jeopardizing national security by his position on SDI, and the Assistant to the Secretary of Defense, Richard Wagner, was also extremely skeptical. “It’s a very far-out technology,” he said, “and there is very little data.”
The internal University correspondence documented what happened to Roy Woodruff when he insisted that U.S. policy was being based on Teller’s speculations. What the National Academy of Sciences and the American Physical Society made public about the Star Wars program in 1987, Roy Woodruff had told both laboratory and government officials in 1983. Five years after Star Wars was sold in Washington, it was still not possible to say that the X-ray laser could even be built.

Nevertheless, Livermore officials continued to sell it. An adolescent mentality is revealed in the titles to the briefings they wrote for the likes of William Casey and Lt. General Abrahamson: “Pillars of Fire in the Valley of the Giant Mushrooms,” and “Soviet and American X-ray Laser Efforts: A Technological Race For the Prize of the Planet.” Were our hard-earned billions in the hands of feverish schoolboys?

When the Southern California Federation of Scientists went public with Roy Woodruff’s complaints, he followed their lead reluctantly because he had exhausted internal remedies. By then he had been subjected to a series of reprisals from demotion to attempts to discredit his abilities and his scientific credentials. Rumors were spread that he was having a “mid-life crisis.” Livermore cancelled his wife’s contract, and his request for a transfer to Los Alamos was blocked until May, 1990.

It was exactly in disputes like this that the much vaunted reasons for University involvement with the weapons labs should have come into play. It was a perfect situation for their intervention, a time for a scrupulously independent peer evaluation of all conflicting views. Instead, the University of California Administration shielded the Laboratories as long as they could.

The internal University correspondence revealed that the response to Woodruff’s complaints—as important as those complaints were to defense policy, the Reagan-Gorbachev Summit Meeting in Iceland, and the spending of hundreds of millions, perhaps trillions of dollars of the taxpayer’s money—were handled with an eye to whether the U.C. position would “sell well” (a direct quote) to the public. What was proper, what was fair, what the truth was had apparently no role in the handling of the controversy.

Then, after the Southern California Federation of Scientists brought the lab conflict into the light of day, the University claimed that they were the ones that allowed these arguments to occur in public, and thus they had performed the most essential of services.17

HOW THE LABORATORIES USED SDI TO DEFEAT YET ANOTHER NUCLEAR TEST BAN TREATY

The decisive factor in preventing a nuclear test ban treaty for at least thirty years has been the refusal of the University of California to oversee any laboratory activity, including lobbying, that would jeopardize their relationship with the DOE and the laboratory directors.

In the pre-Gorbachev days, a test ban was the single most important step in halting the arms race, but the University has a long history of “looking away” when employees of the laboratories used political pressure to oppose such a treaty. The position of Livermore and Los Alamos on testing weapons has always echoed that of the Department of Defense that “Nuclear weapons testing is never going to be done, and neither we nor the Soviets are ever going to be finished with it.”

When a ban was being considered yet one more time in 1987, Congress had no idea that there was a dispute within Livermore about the X-ray laser program, or that tests made at the Nevada test site had only established that X-rays produced in a nuclear explosion could be coaxed into laser form. Lab secrecy had prevented almost everyone in official Washington from knowing that Roy Woodruff had explained in a letter to Paul Nitze that “until the experiments do show [weaponization potential], SDI remains a matter of speculation.”

Of course the laboratory personnel lobbying in Washington knew; and so Machievellian was their political maneuvering that they cultivated moderate Senate Democrats who were trying to head off Reagan’s drive toward “early deployment” of Star Wars. The lab lobbyists knew that “early deployment” was not possible and that later deployment might never happen.

To “cooperate” with the Senators, the Department of Energy was sending a mass of technical lab data supporting the case against “early deployment” to J. Bennett Johnson of Louisiana, Chair of the Senate Energy Committee, and to Jeff Bingham, Chair of the Senate Armed Services Sub-Committee. In exchange for the “assistance,” the Senators returned the “favor,” and were sympathetic to the laboratory arguments against further restrictions on nuclear tests. In fact Senator Johnson was so grateful for the help he had gotten in preventing “early deployment” of Star Wars, that he inserted a provision into the Department of Energy Funding bill exempting the weapons laboratories from any restriction whatsoever on their expenditure of public monies to lobby members of Congress.

This put the DOE in a unique position. They had carte blanche to promote their business, 80% of which is the production of nuclear
weapons. Even the Department of Defense had anti-lobbying provisions in their annual appropriations bill. It was a first.

Once again, in 1987, the lobbyists from the weapons labs joined the Reagan administration and the defense contractors and together they defeated the ban on nuclear testing as they had done in every other post-WWII administration.

After this defeat, the General Accounting Office finally investigated how the laboratories used political pressure to promote their own interests. They found that the DOE used full-time scientists and contractors from both labs in DOE management positions and for both policy making and campaigning in Washington. The University had never interfered in any way with these activities.

The financial stakes for the DOE and their partners in this issue are enormous. It is only by designing, testing and building ever new generations of nuclear and other weapons that government can justify funnelling 60% of all federal spending, or approximately 530 billion dollars a year, to the military, to weapons manufacturers, and to university research facilities.

While continued testing has always been at the top of their agenda, there is no longer any talk about using nuclear weapons, as there was in the 1970’s. When Edward Teller was Director of Livermore, he claimed that rational behavior consisted of having the courage to use nuclear bombs when tactically indicated, and to be prepared to survive an all-out nuclear attack.

And, when Harold Agnew was Director of Los Alamos in 1973, he told a congressional committee that, “We at Los Alamos have a small but very elite group that meets with outside people in the defense community and in the various ‘think tanks.’ We are very aggressively trying to influence the Department of Defense to use these weapons.”

But attitudes toward nuclear testing haven't changed at all. At Los Alamos, New Mexico’s largest employer, the streets are named Trinity, Eniwetok and Bikini after nuclear weapons tests. Director Siegfried Hecker insisted, as recently as February, 1990, that some of the best nuclear weapons people left in the late 1950’s during a testing moratorium, and that the only way to keep a core of scientists who understand the bomb is to let them build more and set them off once in a while.

STATE LEGISLATIVE HEARINGS ON UNIVERSITY MANAGEMENT OF THE NUCLEAR LABORATORIES

The Health and Human Services Committee of the California Senate and Assemblyman John Vasconcellos spent February 11, 1987, hearing expert testimony about the relationship of the University of California’s nuclear testing contracts to its influence on test ban negotiations.

They heard from 13 renowned nuclear weapons scientists that pressure from the labs to defeat test ban treaties was nothing new, and that the laboratories had created a self-perpetuating situation to keep themselves in the business of bomb-making indefinitely.

Hugh DeWitt, a plasma physicist with thirty years at Livermore, said that many U.S. Presidents have been advised by laboratory weapons experts that a test ban was not in the national interest. As part of his testimony in 1987 against a ban, Livermore Director Roger Batzell told Congress, in all seriousness, that the Soviets might hide nuclear explosions behind the sun.

DeWitt said that the weapons laboratories, in the 30 years since World War II, have emerged as very large, powerful, ongoing institutions in American life. “I want to make it very clear,” he said, “that the laboratory management are not unbiased scientific groups simply giving neutral technical advice to the U.S. government. It is my opinion, from my careful reading of statements by the laboratory directors to the various congressional committees—the House and Senate Armed Services Committees, the Senate Foreign Relations Committee and others—that, in fact, the testimony given is highly supportive of continuing nuclear weapons development work. That is why the laboratories became a center of opposition to nuclear test ban agreements of any kind whatsoever.”

Dr. Richard Garwin, who helped build the first hydrogen bomb and developed bomb testing techniques during the 38 years he was associated with Los Alamos, told the committee that “nuclear weapons have their proof test during production, and we do not need testing to see if they work.”

Dr. Ray Kidder, a physicist and nuclear weapons expert who supervised atmospheric tests in the South Pacific and authored over a hundred secret and top secret reports during his 32 years at Livermore, also contradicted the long standing position of the DOE that explosive testing was essential to insure reliability. In a 33 page analysis requested by Congress on this issue, Kidder also concluded that, “the bombs work; you don’t need to test them.”

In response to the analysis Kidder made for Congress, the laboratory administration published its own report with predictably contrary results. Then, an internal lab memo, made public by Massachusetts Congressman Markey, revealed that the labs’ own weapons technology
people had warned that the argument, “we need to test bombs for reliability” is on “thin ice.”

Ray Kidder told the legislative committee that the laboratories have been thwarting the efforts of Congress and various Presidents to implement both test ban treaties and non-proliferation treaties since 1963. He brought this matter to the attention of the University of California’s Scientific and Academic Advisory Committee (SAAC) in 1977 when he believed that the labs were conducting their weapons design work in a way that would prejudice a test ban. He said, “Again in 1982, I tried to engage the attention of SAAC in the matter of our nuclear weapons planning vis-a-vis the possibility of a test ban, but nothing was done... the only thing that I have discovered is that the University of California has been unwilling to make any official recommendations about resolving the question of the need to test nuclear weapons for reliability...they have simply swept this issue under the rug as if it didn’t exist...” When David Saxon was president, he called the issue “too hot to handle” and said that SAAC was not going to deal with it.

Dr. John Holdren, Professor of Energy at U.C. Berkeley, formerly on the staff as a theoretical plasma physicist at Livermore, and the past Chair of the Federation of American Scientists, told the Legislative Committee that the laboratories have been helping to drive the arms race to “undermine rather than reinforce our national security.”

Dr. Josephine Anne Stein, a mechanical engineer from MIT, and a National Security Fellow of the American Association for the Advancement of Science, summarized the “parade of arguments” used by laboratory scientists against a ban as ranging from “misleading through preposterous to downright fallacious. In the mid 50’s,” she said, “Dr. Edward Teller argued that the Soviets could cheat by testing underground, and then they performed a series of tests to prove the point. The Atomic Energy Commission, as the DOE was then called, announced that the shock waves were felt no further than 250 miles away. In fact, a seismic station in Alaska recorded the blast from 2,300 miles away.”

Dr. Charles Schwartz, a Professor of Physics at U.C. Berkeley, told the Committee that the University performs a disservice, a confusion and a deception through its association with the labs. He said, “The only oversight the DOE permits the Regents to do is make more public statements supporting the laboratories and their programs.”

Schwartz did not believe that any changes would come as a result of studies by the SAAC committee, which he described as, “overwhelmingly members of the old club, who know how the labs work, are sympathetic with that work and want to maintain it.”

A Congressional staff member and visiting Fellow at the Center for International Studies at MIT, Christopher Paine, pointed out that, “Scientists who venture into the public policy arena have a special responsibility. They must be sure that the deference that is accorded their expertise base of knowledge does not become a license to undercut or manipulate the normal decision making process of our democratic institutions. This caution especially applies to the officials of U.C.’s nuclear weapons laboratories....”

He asked, “How well has the U.C. management done in assuring that its laboratory employees adhere to this essential criteria for scientists in the public arena? He believed that “the record is deplorable...especially in recent years, because the labs have arrogated to themselves the task of defining which nuclear forces and arms control approaches are appropriate goals for U.S. policy.”

He declared that “the chief contribution of the present laboratory leadership to the public policy debate over nuclear testing has been to obscure the real nature of the choices available and to obstruct the formation of a political consensus for a very low yield threshold ban.”

THE UNIVERSITY’S RESPONSE

In response to all of this testimony, University of California Senior Vice President Frazer told the Legislators, with a straight face, that he believed the laboratories “refrained from exerting undue influence on policy issues.” Frazer said that SAAC was, once again, in the process of evaluating Livermore and Los Alamos and would determine whether technical advice was supplied in a responsible way.

It was no surprise that the SAAC findings supported Vice President Frazer’s “belief” and President Gardner’s “belief” about the propriety of laboratory activities. To insinuate these results, preliminary drafts of the report had been circulated ahead of time to high Livermore officials for their “suggestions and comments.”

The report said, “The Laboratory Directors believe they could not...assure confidence in the nuclear stockpile if nuclear tests were not permitted...that the University is adequately discharging its [oversight] responsibilities...and that the laboratories’ advocacy of new programs is required by their mission.” They found that such advocacy “supports the national policy of maintaining a strong deterrent and does not contravene national policy with respect to achieving further constraints on nuclear testing.” The text repeated the familiar passages from University scripture: “The laboratories fulfill an essential role in maintaining a strong national defense posture, and the continued management of the labora-
tories by the University of California constitutes a public service in the best interests of the United States.”

The legislators had been warned by J. Carson Mark, who had been Hans Bethe’s successor at Los Alamos, that even though SAAC was the only entity in the U.C. system that had any possibility of making an independent assessment of the laboratories, it had never done so. “It had,” he said, “done little of anything except make yearly visits to the labs.”

“Astonishing” was the word used by the Federation of American Scientists to describe the “conduct and content” of the 1987-88 SAAC report. They noted that the committee “did not interview even one knowledgeable internal or external critic of the official laboratory position, or acknowledge the existence of the views of large numbers of noted weapons scientists, including Livermore scientists.” They called the report “an embarrassment to the intellectual integrity of the University of California.”

THE UNIVERSITY’S NON-FEASANCE

The University’s non-feasance in overseeing the laboratories has been given a thorough and continuing appraisal by Tom Hayden, Chair of the State Assembly Committee on Higher Education. Although no one can dictate to the Regents who are “sovereign,” this committee can tie University performance of laboratory oversight to the budget language of state appropriations. The State Budget Conference Committee wanted the University to establish the kind of oversight at Livermore and Los Alamos that would solve the problems brought to their attention at the 1987 Legislative hearings.

The Committee wanted the University to have three on-site oversight officials instead of one, and have the selection of those officials made with the advice and consent of a special committee composed equally of representatives of The Scientific and Academic Advisory Committee (SAAC), and the Academic Senate. The University did not like any of it, but the consent part was going to be where they balked because it struck at the heart of their monopoly on policy making (except educational policy) and their stranglehold on appointments.

The University administration gets its way, while preserving the appearance of democratic procedures, by selecting committees to give it advice. And it isn’t difficult for them to find advisors who want to give them the very advice that they are seeking. But, if they can’t control advice-giving committees, there is always the risk that they might get independent advice. So the suggestion of the legislators that they might actually get such advice, and then might be obliged to follow it, was unthinkable.

At a Legislative Symposium on Laboratory Management held December 12, 1988, Tom Hayden asked Vice President Frazer if the names of the new laboratory oversight staff would be passed on by the Academic Senate. Frazer replied, “The Senate has a collegiate advisory role...they may wish to make recommendations, but there is one particular word in your language which is a way in which the University does not operate, and that is the word “consent”...the Senate does not have a consent role on any appointment of anybody whatsoever.”

From below, from advisory bodies it selects itself, the U.C. administration gets the advice it wants. Control from above is in the hands of a politically appointed Board of Regents that meets just 16 days a year. Although the President of the University submits all of his recommendations to them for approval and they are, theoretically, the final authority, they have said yes to virtually everything he has ever brought to them.

The University administration goes through the motions of policy making by consultation and consensus and asserts continuously a devotion to democratic process and freedom of expression. Yet, the contrast between its public statements about its relationship to the laboratories and the reality of that relationship, reveals a highly manipulative and authoritarian institution flying free of any effective internal or external controls. In the attempt to get the University to improve its management of the weapons laboratories, Tom Hayden exposed another problem, a checks and balances breakdown in the governance of the University of California.

U.C. President David Gardner understands authoritarian systems. In dealing with the DOE and the laboratories he knows he is not the one in control and plays the game from the other side of the table.

Pointing to the selection of laboratory directors as the way in which the University fulfills its management responsibilities, he encourages the fiction that he can make an independent choice. Actually he is only able to pick someone whom he already knows will be acceptable to the DOE, because they have the veto power. They “guide” the selection of the director and after his appointment, the role of the university is minimal.

U.C. Vice President Frazer admitted at the December, 1988, legislative hearings, that beginning in 1940, the involvement of the U.C. with the labs was just about zero, and that “you might say that the University served as an umbrella, a front...” But he protected the illusion of oversight by adding “except for the appointment of a director.”
Little, if any, independent scrutiny comes from the three U.C. oversight committees. SAAC, The Health, Safety and Environmental Advisory Committee, and The Regents Committee, meet one day a year at each lab, and rarely if ever, talk with any of the employees. 41

Tom Hayden explained in his proposal to the legislature for on-site and improved oversight that there was only one person, Dr. James Kane, with an office in Berkeley, supposedly overseeing the laboratories for the University. Because his name was not even listed in the internal directory of Livermore or Los Alamos, it was doubtful that any of the 20,000 lab employees even knew how to contact him. 42

As a result of Hayden’s efforts, eighteen months after the legislative hearings, the State Budget Conference Committee adopted a non-binding “Supplemental Budget Language” rider to the appropriations for the U.C., recommending the appointment of additional oversight officials.

After months of stalling and opposition, a search committee appointed by President Gardner, finally, in February 1990, presented him with the names of three candidates, all of whom would have been current or former employees of the laboratories and hardly the independent overseers that the legislators envisioned. The process was also subverted because, according to Vice President Frazer, the primary function of the new staff would be to develop new opportunities for collaboration between the laboratory and the University.

In wanting to tie the knot tighter, the University administration was preparing itself for the fall of 1990, when the Regents would make a decision about another five year renewal of the contract with the DOE. Of course, convincing the Regents was not the problem. The only thing that could interfere with the renewal of the contract would be widespread and organized faculty disapproval and a massive outcry from the public. Neither of these things had ever happened in the past.

Therefore, the University did not expect to have to deal with either the conclusions of the Jendresen Report, or the successful lawsuit of the Western States Legal Foundation.

THE JENDRESEN REPORT

Tom Hayden, as a practical politician, had not been trying to sever the U.C.-lab relationship. He had much more limited goals: better oversight, assurance that dissenting views within the laboratories were known to U.S. government officials, and a prohibition against lobbying for new weapons in which the labs had a vested interest.

He was to find himself more modest in his aspirations than the committee of the University of California Academic Senate, chaired by a U.C. San Francisco Dentistry Professor, which concluded in November 1989 that the University should “phase out its responsibilities for operating the Lawrence Livermore and Los Alamos Laboratories.” 43

The Jendresen Committee did what all the other prior lab study committees had failed to do in 1970, in 1975 and again in 1978. They addressed courageously the critical and previously ignored ethical issues and asked the important questions. Was classified work and the development of nuclear weapons as a primary mission, a task that contributed to “human well being”? If not, then was it an appropriate “public service” for a university? After two and a half years of study, the answer was a resounding NO.

As more and more faculty legislatures on University campuses agreed, and voted for an end to the U.C. management, the U.C. administration sent Dr. James Kane and lab proponents on tour to talk about the continued need for this “valuable and important national public service.” Such active promotion of the status quo gave the lie to the other, often stated U.C. demurrer, that the University was not “seeking” the association with the labs but was simply “available to continue this service.” 44

THE “PUBLIC SERVICE” OF THE DOE

Americans only see television coverage of dead communities in the Soviet Union, but large areas around DOE facilities at Hanford, Washington, and Savannah, Georgia have also been sacrificed and closed to public use for the foreseeable future. The International Physicians For The Prevention of Nuclear War calls this problem, “A Creeping Chernobyl.” 45

Sixty to seventy billion dollars is the cost of cleaning up the environmental contamination at all 17 DOE nuclear weapon production and testing facilities, and it will take 600 to 700 million dollars a year just to stay in compliance in the future. An investigation, requested by Senator John Glenn, called the safety and health problems at these sites a “major challenge for the country,” and Senator Tim Wirth of Colorado called these costs “the great black hole of the federal budget.” 46

But the activities of the DOE have been even more of a disaster to the health of the public than to its financial condition. Livermore, which makes nuclear devices, uses the same dangerous procedures and has the same contamination problems as nuclear production facilities. Both machine uranium and plutonium, fabricate high explosives and plastics,
produce radioactive isotopes, and use highly toxic and radioactive substances. 47

The University of California has been a permissive manager at Livermore. The labs have a 35 year history of storage and handling mishaps, accidental spills, airborne release of radioactive wastes, and contamination of the soil and groundwater. In 1984, the Environmental Protection Agency put Livermore on the national list of Superfund sites, requiring priority cleanup. From the Los Alamos Laboratory, plutonium and other radionuclides are swept down the canyons to Sante Fe and Albuquerque. 48

The Physicians for Social Responsibility in the San Francisco Bay area have addressed an array of public health problems caused by the activities at Livermore, particularly the unique hazards posed by alpha emitters such as plutonium. Once incorporated into lungs and bones there is no safe threshold below which there is safety, and that contamination never goes away.

Their position paper on the effects of low level radiation describes the kinds of contaminants associated with nuclear weapons production and their effect on the environment and on people. Unexplained, there is an incidence of malignant melanoma three to four times higher than expected among employees at Livermore. 49

Three hundred twenty thousand cubic feet of radioactive waste is buried at Livermore, including 81,000 pounds of uranium. Each day the Livermore labs release 5 to 6 million curies of radioactive material into the air and will produce 600,000 gallons of liquid radioactive waste in 1990 alone. Contamination of the groundwater has been demonstrated with the finding of radioisotopes in both irrigation water and water released into San Francisco Bay. Another waste pit has been leaking, possibly as much as a few hundred curies of tritium, into ground water. 50

A LEGAL CHALLENGE

When the DOE made plans to open an experimental facility at Livermore to produce weapons grade plutonium by applying high powered lasers, they faced a legal challenge by a consortium of environmental groups represented by the Western States Legal Foundation. The Foundation wanted an environmental impact statement on the use of plutonium in an urban area.

The Foundation also challenged a proposed new toxics incinerator that would carry wastes like plutonium isotopes, radon, strontium, and uranium into the air for “public inhalation.” 51

When Lab Director John Nuckolls, who declared at the Legislative Symposium that, “I am an environmentalist,” talked to citizens groups, he said that the laboratory had provided bottled water to Livermore Valley residents after the ground water contamination had been discovered. But, he neglected to mention that the water was given to those whose wells had been poisoned, in compliance with an order to do so by the Department of Health Services, and only after that agency had made a determination that there was “clear and imminent endangerment.” 52

In preparation for renewing their management contract with DOE, the University of California prepared an Environmental Impact Report on the Livermore Laboratory. Comments by the community about environmental concerns were added as a brief summary. Missing from the report entirely was the information about contamination and health hazards from the EPA and the California Department of Health Services.

Representing the Tri-Valley Citizens Against a Radioactive Environment at the Legislative Symposium in 1988, Marylia Kelley said that each time the labs did additional testing, drilled more wells and provided water, it was always under order from an outside agency.

Jackie Cabasso, the director of the Western States Legal Foundation, pointed to 35 years of laboratory disregard for the Livermore Valley and its residents, and asked the critical question, “Where is the manager?”

Where was the University of California hiding and why? When a variety of local, state, and federal officials organized a plan for cleaning up the Superfund site as mandated by law, it was as if the University didn’t exist. Cabasso said, “The University is not mentioned in the preparation of the plan, as a participant in the plan, as a key contact in the plan, or as an information source or repository. There is simply no mention of the University of California.” 53

Of course, if the U.C. administration had acknowledged these environmental problems publicly, it would have been harder to simply ignore them when they prepared the Environmental Impact Report that preceded the next renewal of their contract with the Department of Energy.

Both the draft version and the final version of the report were provided to the Regents simultaneously. The Regents were required by their Chairman to vote on both approval of the Environmental Impact Report and the continuation of U.C. lab management in one vote. Thus, with the exception of Regents Waida, Ross, and Sheinbaum, and with Regent Hope abstaining, the majority agreed to both certify the EIR and renew the management contract.

Cabasso told the legislators that, “This Environmental Impact Report
is an oversight document; its preparation is part of U.C.’s management function.” She pointed out that reports on file with the EPA and the Department of Health Services were omitted, including the problem of ground water contamination and the inclusion of Livermore on EPA’s Superfund priority list.

In voting to certify the EIR, the Regents found that there were no significant impacts on the environment as a result of the operations at the Livermore Laboratory. Their contempt for these issues was illustrated by their response to the representative of the Tri-Valley Citizen’s Association Against a Radioactive Environment, when she attended a Regents meeting in Los Angeles before the vote on the EIR. She said, “They gave me five minutes, and their only response to the concerns of the community and to me was a statement to the effect that if I was so worried about the environment in the Livermore Valley, why didn’t I move?”

Like the University, the DOE monitors itself so that its policies cannot be challenged by outside agencies. Thus, it was possible for them to claim, in response to community concerns, that there were no significant risks to health from radiation exposure below a certain threshold, because they set those thresholds levels themselves.

In October, 1987, The Western States Legal Foundation, with the Southern California Federation of Scientists as the lead client, sued the Regents of the University of California and President David Gardner over the adequacy of the University’s Environmental Impact Report.

Two and a half years later, the presiding judge advised the University to abandon further litigation, and to settle the case and pay plaintiff’s court costs. It was a victory. A new Environmental Impact Report would have to be written before the 1992 U.C.-DOE contract renewal. Public participation was to be expanded beyond the prior legal requirements and copies of studies used in the next EIR would be available to the representative of the plaintiffs for their timely response.

Later in the year, the same plaintiffs objected to Livermore’s new plan to produce weapons grade plutonium at Livermore with a new laser process. The DOE first agreed to a full EIR, but later cancelled the project. “Such an environmental report would take a year to complete,” the DOE representative said, “and it might attract further legal challenges.” The Energy Secretary explained there were also budget constraints, and that additional capability to produce plutonium “does not appear warranted.”

In June, 1989, the Secretary of Energy, General James D. Watkins, announced that the DOE was afflicted with a culture of ineptitude and mismanagement by officials who had long been inattentive to changing environmental and health standards.

General Watkins and the U.C. Administration need to talk. Dr. Keith Miller, a Mathematics Professor who, along with 270 Members of the Berkeley Academic Senate, has repeatedly documented the failure of U.C. lab oversight, shared his personal reaction to the years of effort with the members of the 1988 Legislative Symposium. He said, “My major impression, I have to tell you, coming away from these discussions, is that David Gardner is a man who is not easily convinced that anything is wrong with his operation. Not anything at all.”

Postscript

Little has changed since the Reagan-Teller conversation in 1982 because our new President is also a fan of weapons in space. While on a speaking tour in February, 1990, to promote his defense budget, George Bush visited Livermore before traveling to San Francisco where he would talk to members of the Commonwealth Club and describe a new weapon.

As if the X-ray laser fiasco had never happened, he was briefed by Teller and Wood about “Brilliant Pebbles,” the latest Livermore toy that would cost between 50 and 100 billion dollars, depending on who was making the estimate. Bush was given a scale model of the small homing rocket that would be one of thousands circling the earth 250 miles away—ready to steer a collision course with incoming missiles by detecting the exhaust in their plumes.

After the Jendresen Report and the faculty vote to sever ties to the labs, the SAAC predictably issued their own report recommending renewal of the DOE contracts. Teller was back in Washington in May, 1990, briefing J. Danforth Quayle on SDI, talking up “Brilliant Pebbles,” and the continued need for weapons research and production before a meeting of the American Defense Lobby and the Defense Forum Foundation.

He told them that the arguments against Star Wars were no longer valid, that the Soviet Union was a continuing danger, and that India would be a threat in the future. His statements carried the imprimatur of the University of California. Across the bottom of the TV screen was his name and his affiliation — EDWARD TELLER, LAWRENCE LIVERMORE LABORATORY.
SUMMARY AND RECOMMENDATIONS

The case for the continuing association of the University of California with the two nuclear weapons laboratories has benefited, in an extraordinary way, from assumptions made about the guiding ethos of universities in general.

Any research, the reasoning goes, including nuclear weapons research, would have to benefit from the oversight of a great university system which brings an academic spirit, ideal and ethic that keeps work more honest, open, and objective. There is also the hope, that the university will be “a good influence,” by persuading the laboratories to move toward constructive science.

Unfortunately, the real life history of laboratory activity and University oversight erodes the credibility of these arguments, and if the University has actually associated itself with Lawrence Livermore and Los Alamos, for these reasons, it has failed in that mission.

In taking on the task of managing two nuclear weapons laboratories, we have the paradox of a smaller and less powerful institution, supposedly in charge of a branch of a massive federal agency—an agency protected by secrecy, charged with the most “sacred” of duties, national security, blessed by the executive branch and endowed by the Congress with vast sums of money.

It would be difficult to find a better archetype of power and money than the DOE weapons laboratories. Everything about them is enormous, bigger than life: their budgets, their plans and projects, the awesomeness of what they produce, their mission to invent world destroying technology, and the degree to which they are out of reach and uncontrollable.

No wonder the University of California administration is bedazzled by this assignment. In its bedazzlement it has become blinkered, and carrying out the task of laboratory oversight has been a sham and a failure because it is an impossible task on its face.

No wonder the University has been deferential, sees no faults, looks aside, exerts no control and assumes the passive stance exemplified by the statements:

“We don’t seek it,” (the association with the laboratories)
“We do it as a public service.”
“We do it because we are asked to do it.”

There is a disturbing refusal to think independently in those assertions and a lack of candor. If the University does not “seek the association” they should be willing to step aside, but they will not. They promote the association aggressively even though there is no evidence that other, privately managed laboratories, like Battelle, Sandia, or Oak Ridge, are suffering from lack of university oversight.

But the best evidence for the UC administration’s bedazzlement is its willingness to suspend critical judgement in order to keep the laboratories in the University system. Since the University lends its name and prestige to support science and scientists who put us on the edge of extinction, one would expect, at the very least, some vigorous and public searching of the soul about the morality of these activities.

And, the public has the right, as the Jendresen Report emphasized, to expect an institution that bills itself as one of the world’s biggest and best, to be a leader and not a follower, and to engage in activities they conclude are worthy, regardless of what anybody, including the United States government, asks them to do. If our best and our brightest will not stand up to government, who in the world will?

But neither the force of morality nor our dire predicament in the nuclear age has been sufficient to overwhelm politics and money, acquisitiveness and bigness. Even though nuclear weapons work is a malignant force in the world, and bleeds money and talent from thousands of life-enhancing endeavors, the tentacles of the laboratories are used by the University to reach further and encompass more. They are another appendage, like the increasing number of campuses, another asset like their real estate, their fleet of ships and the 20 Nobel Laureates.

The University has just won a struggle with the DOE over their right to patents and licenses. There is a big future in molecular biology, biotechnology, the human genome project, the superconductivity program at Los Alamos, the manufacture of superconducting wire, and the possibility of eventually developing a laser fusion machine. Through commercializing non-secret aspects of laboratory work the UC can also increase its income. Techniques developed at Livermore have already helped to found fifty companies with substantial annual revenues.

Big science has huge costs that require federal grant money. Los Alamos wants a 500 million dollar atom smasher and Livermore would like a one billion dollar laser fusion facility. The next steps in fusion, lasers, and the genetic code will all cost over one billion dollars, and the U.C. wants to be part of it all.

But being an agent of the DOE is not the only route to big science and federal money. The University of California is well equipped to compete with other universities without compromising its integrity by claiming to be a “positive influence” in the development of nuclear weapons.
The way the University could actually be a positive influence would be to encourage the staff at Livermore and Los Alamos to refuse to work on machines of death. That would be a truly significant accomplishment for the University of California, and one that requires a high order of courage and leadership.

The concern of the administration for the way the University is perceived by other needs to be expanded. They have reason to worry about the judgment of future generations who will remember how they tried to make homicidal work academically respectable and how a great university bound itself to the inventors of destruction instead of spreading the truth about the world’s peril.

We trust that the U.C. administration and the Regents will finally see their real educational mission and the shape of the future as clearly as the faculty, the students, and all the people determined to eliminate the nightmare of nuclear bombs. It is inconceivable that the University of California will voluntarily take any further role in creating more of them.

HOW THE UNIVERSITY OF CALIFORNIA MOVED TO NEW ZEALAND: A FABLE

This fable captures, at least for me, truths behind the facts of the University-Laboratory connection.

As you listen to the pseudo-rational explanations of the University President in the aftermath of a destroyed continent, the psychological “splitting off” of the nuclear reality leaps out at you like the sight of the other face in a figure-ground reversal.

His detachment is a mirror of our own. It makes possible debates about the merits of university oversight. It keeps us from screaming about the madness of a world on borrowed time.

— D. H.

The second Nuremberg trial was held at Christchurch, New Zealand after a nuclear holocaust turned the Northern Hemisphere into a wasteland in 1993. The bombs were designed at the Lawrence Livermore National Laboratory, and the President and 15 Regents of the former University of California were being tried for crimes against humanity.

The accident happened when electro-magnetic radiation from the Pave Paws Radar System set off the electro-explosive devices on U.S. nuclear missiles. Three thousand megatons were detonated and the first casualties were 100 million people who died in the firestorm.

It was the first trial in 50 years against makers of People-Incinerators, whose defense was always the same. “Just a service to our country,” the German oven makers had said. “Just to scare people,” Himmler assured them, “the ovens will never be used.”

After the Chief Prosecutor made his opening remarks, he turned to the former U.C. President and said, “Your administration was always concerned about something called ‘the risk of University exposure.’ That phrase appeared on every other page of the internal documents that we seized. What does it mean?”

“Well, the University had to protect itself from lawsuits and bad publicity,” the former President said, “and discourage people from suing us if they stubbed their toe in one of our parking lots. University Hall had a giant legal staff that tried to settle everything quickly, without ever admitting any wrongdoing on our part. Settlements were based on complainants agreeing never to mention the problem again or discuss
how much money we paid them.

"Basically our position was that nothing was ever our fault," he explained, "and I hope that everyone at the present hearings will consider our record of excellence in lieu of our circulating a prepared press release."

The Prosecutor continued, "Were't you advised by anyone on your legal staff that if the bombs designed at Livermore caused hundreds of millions of deaths you could be accused of crimes against humanity?"

"No, our lawyers didn't deal with issues like that. They cooperated fully in the mission of University Hall which was looking wonderful at all times for financial reasons. So, the Chief Counsel would never have permitted any of our activities to be interpreted in such a negative way. It was against policy.

"The way to run a successful institution," he said patiently, "is to deny even the possibility of wrongdoing. So, it's unthinkable that the Public Relations Office would have permitted our lawyers to even utter the words 'crimes against humanity.' If news of some small trouble we were in accidentally reached the outside world, our press release would say we had known about it for months and already had the solution. This management tool is called co-opt jujutsu," he said proudly, "I invented it myself with the help of the Administrative Vice President.

"The point is to claim you are 'running towards a problem' when actually you are rushing past it downstream like a ship in the night. We were running toward it, so we could put it behind us. The only place we didn't want to be was parallel with it. These maneuvers took a lot of finesse."

"Didn't you know that the labs were designing weapons to incinerate entire populations and damage the earth beyond repair?" the prosecutor asked.

"Nobody thought like that. Sure, there were peace groups carrying on about omnicide and nuclear winter, but they had a lot of competition from the 'Anti-Fur Coat People.' We just yawned. Gloom and doom is not the American way when national security is at stake."

"Where were all those high-minded student activists?" the prosecutor wanted to know, "like the ones that helped stop the war in Viet Nam? Didn't they know what was going on at Livermore?"

"Part of our risk management strategy was to help students with inflated hormones find other outlets. We sponsored speeches by the professional protesters who travel the university circuit for a fee and expenses. And we encouraged fasts and die-ins over harmless things like affirmative action and the starving Ethiopians."

"I must say the most puzzling issue in this case is how you could have considered the design of mass murder machines a proper scientific mission for a great university. Here in New Zealand we believe that science is supposed to make life better."

"That's just an old General Electric slogan from the 1950's," he replied, "G.E. was out there making as much money from defense contracts as anybody else. Anyway, your view of science is naive. Nobody cares a whit whether you're studying the life cycle of Lepidoptera, or People-Vaporizing lasers. It was only my job, as I said repeatedly, to see to it that there was freedom of expression for all views, not to say that one project was more worthwhile than another."

"We understand that you were paid to oversee the work of the weapons laboratories," the prosecutor continued, "and most of the complaints about you before the holocaust were that you didn't do much supervision."

"It is true that the government paid us for oversight," the former President conceded, "but we didn't have to oversee every single thing. The Department of Energy had to have a little room to do its job too, and you could just nose around so far into all their super-secret projects before you jeopardized that small extra income the labs contributed to our discretionary fund.

"Our lawyers saw to it that our management contract with the DOE included the costs of all the activities we considered necessary to ensure that the faculty, students and general public supported our management of the Livermore and Los Alamos Laboratories. They worked closely with our public relations people to make sure that everyone had a positive perception of all of our activities at all times.

"So, our legal staff was very aware of the important things, and very careful about using our financial resources to support the management of the University as we, in turn, provided a superior education to the young people of California."

The prosecutor was sceptical. "We believe that while you were working to educate the young people of California, you were, at the same time, reducing their chances of becoming educated old people. Did you think those bombs were ornaments? I can't believe you didn't know that if any of the weapons created at the labs ever detonated, even by accident, as in the present case, your position would be similar to the suppliers of
People- incinerators in the last holocaust."

Focusing now on the main defense of the President and the Regents, the prosecutor said, “Your chief counsel must have realized that in a War Crimes Trial that business about ‘we’re just manufacturing instruments of mass destruction as a public service’ wouldn’t fly."

To protect his reputation as a scientific manager, the former President of the former University revealed some secret information, saying, “Please Mr. Prosecutor, give us some credit. We did learn something from our years of association with the weapons experts, and we actually simulated several different doomsday scenarios on one of our Cray computers. The conclusion was,” he said proudly, “that a nuclear explosion exposed the University of California to a very low level of risk from a lawsuit. The results were most reassuring.

“First of all,” he declared, “we couldn’t be sued before anything happened, and secondly nobody was going to sue while the country was dealing with widespread radiation poisoning. The computer calculated that rats, cholera, contaminated water, hepatitis, dysentery and septicaemia would all be epidemic, so suing the University of California wouldn’t be a high priority for anyone.

“Too many factors were operating in our favor, so a risk management perspective we were in excellent shape. Frankly, after that, we just stopped worrying about institutional exposure because of our connections with the nuclear labs.”

A month later, the second Nuremberg court found all the defendants guilty. The judge turned to the 15 former Regents, and to the former President and to all the former Vice Presidents of the former University of California, and said, “You realize that alternative sentencing is not possible in this case. In overseeing the weapons laboratories we already have an unfortunate example of your public service efforts.”

Naturally the defendants were distraught. But, even though the Northern Hemisphere was uninhabitable right now, at least the President still had his 6% home mortgage and his pension with the built-in cost of living increases. He wasn’t ready to give up hope.

So, he offered to bring the University of California to New Zealand as an alternative to death or incarceration. He promised to build a U.C. campus right there at Christchurch, saying, “it will be an elite institution called UCCC, dedicated to free expression and above all to excellence. It can be financed with stiff student parking fees, and I can personally make it happen because I would never have left California without both the Searles Fund and the Regent’s Investment Portfolio.” He assured the tribunal that if all went as planned, there would soon be new campuses on the Cook Islands and Tonga.

All the other defendants joined him in pleading to recruit minorities and women, and requiring that all undergraduates take not just one, but two, Maori study courses.

The Court approved the plan, but imposed Draconian constraints. The only money to be used for educating students was to come from the New Zealand government. UCCC was forbidden to lobby for more or go after private donations. Also strictly forbidden were press conferences, the employment of lawyers or public relations staff, and the use of risk management strategies. The defendants turned pale when they heard the conditions of their release, and briefly considered that death might be more merciful.

Nevertheless, they accepted the terms, and the new University either blossomed, or was perceived to blossom, no one could tell which.

But soon afterwards, a radioactive cloud began its descent from the north. So everyone was grateful that Edward Teller had accompanied the Regents when they left California on the DOE jet. To deal with the threat he invented a cloud shield called “Sparkling Curtains,” which he promised would keep the problem on the Australian side of the Tasman Sea.

“Sparkling Curtains” bankrupted New Zealand and the whole South Pacific region before it could be put to the test, but Teller himself, along with the former President and Vice Presidents, and the former Regents of the former University of California, wisely turned to shearing sheep, an occupation that substituted nicely for the manipulation of perceptions and the micro-management of risks.

THE AUTHOR

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