

FIGHTING CHANCE

John 8: 31-32

Proverbs 22: 3

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CIVIL DEFENSE IN 1994

In 1985 Laurelee and I decided to make an effort to help improve the availability of civil defense facilities and knowledge to the American people. In the beginning, we thought that there might be some way in which our abilities as scientists were needed in the development of equipment or techniques. Our first step was for me to attend an annual meeting of the American Civil Defense Association where I met several of the most outstanding civil defense professionals including Dr. Conrad Chester and Greg Zimmerman of Oak Ridge National Laboratory. This led to an opportunity for an extended visit to Oak Ridge and the Emergency Technology Library which, under the care of Dr. Chester, housed the most complete collection of technical civil defense information available in the United States.

That library included about 5,000 books, reports, and other documents recording billions of dollars worth of civil defense research and development that had been carried out by American scientists and engineers during the preceding four decades. Chester and Zimmerman had selected about 1,000 of these documents which comprised the best of the information. After reading these 1,000 documents (and some of the other 4,000) under their direction, it was evident to me that the lack of civil defense for Americans was entirely a political problem. There were no technical problems that had not already been adequately solved.

Some of these problems had been solved in numerous ways. For example, many different nuclear defense shelters had been built and tested with good results – cylindrical or rectilinear, concrete or steel, and single-use or dual-use. Blast valves, blast doors, air filtration systems, and other essential items had been manufactured and successfully tested in many different designs. With their help and that of several other experts, we selected a single combination of these techniques that represented a good, cost-effective design for a national shelter system. This design served as the basis for our cost estimates for national civil defense.

The records also included reports of the outstanding Oak Ridge “expedient” civil defense research effort that had been carried out by and under the direction of Cresson Kearny and Conrad Chester and summarized in the book *Nuclear War Survival Skills* by Cresson Kearny.

Expedient civil defense information has special value, because it permits protective actions to be taken by unprepared Americans regardless of national preparations. Work toward national preparations like those in Switzerland either succeeds or fails (mostly fails in America), whereas work to distribute expedient information only succeeds. The more work done, the more people have this valuable information regardless of currently perceived need and political conditions.

Ronald Reagan was President when we started work, and a civil defense message could receive a hearing in Washington. Nationwide distribution of about one-half million copies of our book with Gary North, *Fighting Chance*, gave us enough name recognition to make a reasonable effort. We met with many Senators and Congressmen, authored civil defense resolutions that were introduced in both houses of Congress, and even picketed the Pentagon.

Working with the Federal Emergency Management Agency, FEMA, we lectured at the National Emergency Training Center, built a series of large mobile civil defense shelter displays, and helped prepare some FEMA educational literature.

We also published, in collaboration with Cresson Kearny, the updated edition of *Nuclear War Survival Skills*. FEMA incorporated this edition of *Nuclear War Survival Skills* into a mandatory course for emergency managers and therefore distributed about 10,000 copies to state and local emergency personnel throughout the United States.

Fighting Chance, which became a project of the non-profit Oregon Institute of Science and Medicine, received support from about 8,000 individuals and organizations. While most of these people supported the need for a national civil defense system, many of them wanted to provide protection for themselves, their families, and their neighbors regardless of government actions. Therefore, we found ourselves responding to a great many detailed questions about civil defense technology and procedures. This led to our production of 15 educational video tapes, many practical articles in this newsletter, shelter plans, and other materials in addition to the book, *Nuclear War Survival Skills*. Actions taken by individuals on the basis of this information protected only a small percentage of Americans, but they have set examples for others and have further distributed knowledge about civil defense technology.

The core goal of the *Fighting Chance* project is to increase the readiness of the American people to survive the risks posed by potential damage from nuclear, chemical, or biological technology in accidents, terrorism, or war. The precautions that we advocate are also excellent preparations for natural disasters such as tornadoes, hurricanes, and earthquakes, but this is secondary to our primary goal. Sensible preparations increase the possibility of long-term individual and national survival. These risks differ in the degree of danger that they actually represent and the way in which they are perceived by most people – perceptions that are altered significantly by special interest groups that use fear of these dangers to manipulate Americans in various ways:

- 1. Nuclear accidents. The chance of a nuclear accident that endangers the lives of ordinary citizens in the United States is very, very small. Poorly constructed step-ladders that lead to household falls are a greater risk. Moreover, if a release of radioactive material from an American nuclear power plant were to occur (a very unlikely event in view of modern safety

measures), it would most likely be a minimal release that would raise the natural background radiation level a small amount. Since hormesis research has shown that current background radiation is *below* that required for optimum health, such a release would probably be beneficial to public health.

Nuclear accidents have a high perceived risk solely because anti-technology propagandists have used fear of the unknown new technology that also produced the atomic bomb to terrorize the public and build opposition to nuclear power. Even the Chernobyl accident – a poorly managed accident in a nuclear weapons reactor that did not even have a containment building (as Petr Beckmann used to say, the Soviets apparently considered human life to be less valuable than concrete) – caused immediate deaths of only a few individuals who were exposed to very high radiation levels while fighting the fire. Estimates of later deaths from radioactive contamination have been wildly exaggerated for political purposes.

Anti-technology propagandists have even convinced some members of the public that nuclear power plants can explode like nuclear weapons. This is entirely false. It is the equivalent of saying that, since dynamite and bleach both involve chemical reactions, the home washing machines in America are in danger of exploding – both use *chemical* technology.

- 2. Nuclear terrorism: The risk that a nuclear weapon will be used by terrorists rises with each passing year. With tens of thousands of military nuclear weapons in national inventories, large amounts of weapons-grade uranium and plutonium potentially available to the black market, increasing dissemination of technical knowledge, and the existence of many countries that sponsor terrorism, the chance that terrorists will come into possession of a functional nuclear weapon is increasing. Although the spread of nuclear materials has been diminished by security measures and treaties, it cannot be stopped entirely. As time passes, the capability of initiating nuclear explosions is being inexorably disseminated throughout the world.

Nuclear terrorism is not a threat to most Americans nor is it an immediate threat to national survival, since damage would probably be limited to one or two high-visibility cities like New York or Washington, DC. Loss of life in a city in which a nuclear weapon is exploded could be markedly diminished by prior installation of a good nuclear shelter system. With warning, the population could be in shelters before the explosion. This would limit deaths to those in shelters within a few hundred yards of the explosion. Even if the weapon were exploded without warning, shelters could prevent deaths after the explosion – radiation and fire ordinarily account for a large part of potential deaths.

The most probable scenario leading to terrorist explosion of a nuclear weapon in an American city is in connection with one of the small wars that are so popular with American politicians. Increasingly, it seems, a perk of high office in the United States is the privilege of using the American armed forces to threaten or kill people in underdeveloped countries – always, of course, with the noblest of goals. Eventually, this may be tried against a country that manages to obtain a nuclear weapon. Although much has been said of the danger that such a country would also obtain a delivery system, such as a ballistic missile, the most likely form of attack would be by boat. A weapon could, for example, merely be floated into New York harbor.

The Biblical warning that “all they that take the sword shall perish with the sword” [Matthew 25:52] is likely to apply to Americans even if our country manages to avoid a devastating, nation-destroying war. We cannot expect to continually apply deadly force to relatively defenseless people all over the world without eventually paying a terrible price.

It would appear that this danger of nuclear terrorism is limited to people who live in high-profile locations that would be likely terrorist targets. Most Americans live in other places. All Americans should consider, however, the national reaction that might occur if several hundred thousand or more people suddenly lost their lives in a terrorist nuclear explosion. Draconian internal controls might be instituted in a futile effort to prevent further attacks. These controls themselves could markedly reduce our freedom, change our way of life, and sow the seeds of national revolution or civil war.

- 3. Nuclear war. The capability to wage nation-destroying nuclear war is currently limited to a few Western countries and several of the component countries of the Soviet Union (or whatever it is calling itself today). In the near future, this capability may spread to one or more of the larger Middle Eastern countries such as Iran.

Recent political and economic difficulties in Russia and her allies have led to the widespread belief that the threat of nuclear war has diminished or even disappeared. By agreement, Russian nuclear-warhead-equipped missiles are not even supposed to be aimed at locations in the United States – an unverifiable agreement that could, in any case, be reversed in minutes by re-aiming.

The fact is that thousands of nuclear weapons exist today that can be delivered and exploded at locations throughout the United States. American scientists have invented strategic defense technology that could prevent the delivery of most of those weapons, but American politicians have refused to appropriate funds to construct it. They have instead squandered America’s defense dollars on self-serving non-defense programs and on conventional weapons expenditures for purposes that can best be described as imperialistic militarism.

In the event of a generalized nuclear attack upon the United States, a great many people would die and our national survival would be seriously imperiled. A nationwide civil defense system could prevent many of those deaths. Regardless, however, of efforts made by Presidents Truman, Kennedy, and Reagan and the best efforts of many individual citizens, America has no credible civil defense whatever. Moreover, under the Clinton Administration (to be fair, this policy originated under President Bush), even the words “civil defense” have become politically incorrect within the federal bureaucracy. Those few veteran administrators at FEMA who actually favor civil defense cannot, at present, do anything on its behalf. Even the radiological monitoring program, whereby calibrated radiation measuring devices were maintained throughout the country, is being abandoned (see below).

Although one can hope that our current politicians will be replaced by men and women who actually will act in America’s best interests, the present reality is otherwise. There are two sensible personal actions at present. First, take action to assure that your own family and those people of your immediate acquaintance have good civil defense equipment and training. Second, work to distribute expedient civil defense information as widely as possible to currently unprepared Americans. Cresson Kearny and his colleagues have made the needed

expedient information easily available in the book *Nuclear War Survival Skills*. This book should be distributed as widely as possible. It is available from Fighting Chance in a printed edition for \$12.50. Each copy is printed as camera-ready art for newspaper distribution in a crisis. Instructions for newspaper layout of the most vital information are in the back of each book. *Nuclear War Survival Skills* is also available from Fighting Chance in electronic form on a set of five 1.44 megabyte computer disks for \$19.95. This electronic edition has also been placed on the world-wide computer networks. Complete copies can be down-loaded from those networks, although the cost of downloading is usually greater than buying the book directly. The primary advantage of the computer network version is worldwide availability to millions of people who might have no other access to this information. Sometime in 1995, the other civil defense materials produced by Fighting Chance will also become available in computer format, but expedient information will still be the most important.

In advocating distribution of *Nuclear War Survival Skills* as our best activity at present, we are re-living the experiences of the scientists and engineers who created that information and book. During the decades following World War II, some of America's most outstanding scientists and engineers developed excellent methods for the protection of their country and countrymen from nuclear weapons effects in the event of nuclear war. During the years after this research was largely completed, they watched as the discoveries that they had made were implemented for the people of Switzerland, Russia, Scandinavia, and other countries – but never for the people of the United States. After a while, they reluctantly concluded that these life-saving technologies might never be widely available for Americans.

Since their research program was still in existence (it has since been closed and even the Emergency Technology Library housing the information about those billions of dollars of research and development has been discarded – although the books were fortunately rescued and stored), they decided to direct their work toward a different question: “What can the members of an American family do to protect themselves from the effects of nuclear war even if they have made no prior preparations and have available only ordinary household items and a short warning during a developing crisis?” The shelters and other items that they devised in answer to this question were carefully field-tested as were the instructions by which those procedures can be communicated in writing to untrained individuals. Those instructions are in *Nuclear War Survival Skills*.

The fact that the American people have been left personally vulnerable to nuclear war without the civil defense and strategic defense technology that their scientists and engineers developed is a disgraceful testimony to criminal, dishonorable, unpatriotic, and detestable actions by American politicians. It is nevertheless a fact. Our inadequate but best present remedy is the work produced by a small group of patriotic scientists and engineers at Oak Ridge National Laboratory on expedient civil defense.

- 4. Chemical accidents. These are actually more of a threat than nuclear accidents. As the accident at Bhopal, India, illustrates (this particular event may have been caused by industrial sabotage, but the danger is the same), thousands of people can be immediately killed if certain kinds of ordinary industrial chemicals are released in large amounts in urban areas adjacent to chemical plants. That very few deaths have occurred from this cause in America is a tribute to the excellence of American engineering. We can, however, expect such accidents to increase in

coming years as our chemical plants deteriorate with age. The money that should be keeping this industry up-to-date has been largely taxed away and squandered in Washington.

Even with an increased number of chemical accidents, however, it is unlikely that more than a few thousand deaths from this cause will occur during the coming decades. A good civil defense system would mitigate this danger, but that system is not available.

- 5. Chemical terrorism. One risk from chemical terrorism is that described above with reference to the event at Bhopal. Sabotage of chemical production plants can imperil thousands of people located in the immediate vicinity of those plants. There is also the possibility of direct placement of toxic chemicals in drinking water or air-conditioning systems, although these are also dangers limited to small numbers of people in each event.

The limits of risk from chemical terrorism derive from the limited toxicity of most chemicals. The necessary chemicals to kill large numbers of people are quite bulky both to manufacture and to deliver. Delivery efficiency is also poor. Contamination of water or air involves substantial dilution of the chemical agent and therefore of its effects. Far more people can be killed by the terrorist who invests his time and resources in explosives or biological agents.

There is, however, one very dangerous form of chemical terrorism that has potential to kill tens or even hundreds of millions of people and damage the lives of billions more. This is the ongoing terrorist program by the movement that calls itself "environmentalism."

For example, the organization Greenpeace in cooperation with the Sierra Club and other such groups has recently launched a campaign to "phase out" all chlorine-containing compounds. This campaign is based upon a propaganda effort in which fear of toxic chemicals is generated by wild and false claims about environmental damage and health risks. Herbicides, pesticides, insulating materials, power-generation by-products, fuels, and virtually all human-produced chemicals are demonized in frenzied efforts to produce and maintain fear in the minds of the general public. This is done to keep hundreds of millions of dollars of donations flowing into the coffers of the enviro organizations and also to promote the anti-technology, new-age paganism of those who control the enviro movement.

This terrorism has already raised the cost and reduced the availability of many items that contribute to human good health and long life, but the worst is still to come. Even a partial success of the single campaign against chlorine could make essential pharmaceuticals, disinfectants, and plastics unavailable. Substantial success in these anti-chemistry campaigns would markedly reduce the number of people who can be sustained by our society – the remainder would become victims of enviro genocide.

Moreover, genocide is just what these enviro-terrorists want. Their writings are filled with statements to the effect that humans are undesirable and that the numbers of humans alive should be reduced by half, two-thirds, or more. This terrorism does not involve the actual physical risks of chemicals. It involves instead the pollution of our environment by *perceived risks* that do not actually exist. These false perceived risks are already killing large numbers of people by diminishing life-saving technology, and, if not stopped, may kill enormous numbers of people in the future.

- 6. **Chemical War.** The propellants and explosives of conventional war involve chemical reactions. Chemical war is usually thought of, however, as the use of poison gases and other toxic chemicals. This form of war was used extensively during World War I, but has been used only occasionally since that time.

Chemical weapons have been stockpiled in very large amounts by many countries, but their actual use seems to have been largely prevented by deterrence. Unilateral destruction of chemical weapons, particularly by the United States, has weakened this deterrent factor in recent years, so we may see increased use of chemical war in the future.

As with accidents and terrorism, chemical war is limited by the excessive bulk of chemical agents. Where the agents can be delivered on substantial numbers of military personnel, they are apparently useful, but delivery on a significant fraction of the highly dispersed civilian population would be very difficult.

Modern civil defense shelters include filters that remove most chemical war agents. For unprotected Americans, however, this help is not available. People have become psychologically hardened to the gruesome effects of bullets and explosives, but they have had little experience with the burns, asphyxiation, and neurological damage characteristic of most chemical weapons. For this reason, chemical weapons produce more fear than conventional weapons and have a psychological effect beyond their physical capabilities.

Chemical weapons will probably continue to be used at low levels in world conflicts and may even be used again on a large scale as in World War I. Of the dangers faced by most Americans, this is not one of the greatest, although permanent civil-defense shelters should definitely be equipped with chemical filters where possible.

- 7. **Biological accident.** The anti-technology enviro propagandists sometimes attack the new products of molecular biology and biotechnology on the basis that a dangerous new organism might be produced in laboratories and released upon an unsuspecting and defenseless world. The chance of this happening by accident is actually insignificant. There is, however, a significant danger from bioengineering of new agents for biological war as is discussed below. Accidental release of an agent from one of these programs could be a significant danger.

- 8. **Biological terrorism.** Along with nuclear war, this danger is a very compelling reason to advocate a nationwide system of civil defense. Biological terrorism is by far the most cost-effective means for indiscriminate mass slaughter of human beings.

It has been reliably estimated that several college-educated terrorists with access to ordinary technical libraries and a few hundred thousand dollars with which to purchase off-the-shelf laboratory items could originate, test, produce, and deliver a biological attack that would kill most of the residents of New York City, Washington, DC, or another city of their choice. They would not need exotic new biology. Anthrax, an organism easily isolated from the soil in some parts of the United States, would be sufficient. The deadly disease produced by this bacteria has a long enough incubation period that the terrorists themselves could be safely away to a hideout anywhere on earth before the victims even realized they had been attacked.

For obvious reasons, we are not going to discuss the details of this matter here. There are, however, no secret technologies required for biological terrorism. The necessary information is freely available throughout the world. When asked, at a seminar that we attended, what prevents such an attack, one of America's top biological weapons experts replied that it is *hoped* that those with the ability and resources would be rationally deterred by the horror of such an activity. Given the diversity of moral behavior in the modern world, this hope seems cold comfort indeed.

Permanent civil defense installations can easily be equipped with air filters that remove the aerosols by which biological agents are delivered. These filters are required to be available for use by every man, woman, and child in Switzerland. We estimate that fewer than 10,000 American civilians have this protection. Nuclear weapons are still so difficult to manufacture that the danger of nuclear terrorism comes largely from the possibility of a weapon supplied by or stolen from a government. Biological terrorism is the threat for which terrorist-built weapons is the greatest. (Conventional explosives are, of course, easily and routinely assembled by terrorists. These bombs usually kill only small numbers of people, although professional planning, fuel-air explosives, or special situations such as large numbers of occupants in a modern building can put tens of thousands of people at risk in a single event.)

- 9. Biological war. So far, biological war has been avoided by deterrence. During World War II, very large amounts of biological weapons were built and deployed by the Americans and British and possibly other governments. Anthrax was widely used in these weapons. Since that time, additional large amounts of biological weapons have been built, especially by the Soviet Union. Prohibited by treaty, there is ample evidence that these weapons continue to be built and stockpiled regardless of agreements.

The horror of biological weapons, the danger that they will be used in retaliation, and the difficulties of limiting their effects to only the target have deterred their use. Also, the likely reaction of world-opinion and of the surviving victims in any country upon which they are used probably makes them counter-productive in those cases where the user of the weapon can be identified and is a nation with something to lose. Deterrence is, of course, of little effect against terrorists.

Like nuclear weapons (but with a much lower price tag), biological weapons are ideally suited for use as insurance policies by dictatorial governments. The actual use in war of biological or nuclear weapons by, for example, Saddam Hussein of Iraq, would almost certainly be suicidal both for him and for Iraq. The possession of such weapons, however, with the threat to use them in retribution at the moment of death of his regime or his own death, could easily prevent other countries from pushing too far for his demise. This might have been a factor in the American decision not to completely defeat Saddam in the Gulf War. If so, the cause was biological weapons, since Iraq had not yet completed a nuclear weapon.

Has the need for civil defense diminished in recent years? It has not. Even relative to world war with nuclear weapons, the perceived risk has temporarily diminished, while the weapons themselves remain. No country with a proper regard for the well-being of its citizens would endure the risks outlined above without providing nationwide civil defense. In the absence of moral government action, all families should provide their own protection.

RADIATION MEASUREMENT

Throughout the decades of decline of civil defense in the United States, one program remained relatively alive – radiological monitoring. When we first visited the National Emergency Training Center in Maryland (before our mobile civil defense shelter display was installed there), there were no items of actual civil defense equipment visible anywhere on the campus except for radiological monitoring equipment.

Even anti-civil defense agitators tolerated radiological monitoring because it could be represented as a response to the alleged dangers of nuclear power plant technology – a technology that they were attempting to demonize in the public mind.

In cooperation with State governments, the Federal Emergency Management Agency, FEMA, provided thousands of radiation survey meters and dosimeters to each State, calibration equipment for keeping those meters in good repair, and continual courses in radiological monitoring for civilians and emergency preparedness personnel.

Under the Clinton Administration, this program is now being terminated. Soon, most of the emergency radiation monitoring equipment in the United States may cease to exist. FEMA is phasing out funding for this program. Individual states are gradually terminating their own involvement in accordance with local funding problems.

In Alaska, Fighting Chance supporter David Ways decided to take personal action. The State agreed to allow him to take possession of the equipment which was otherwise to be entirely destroyed. Arranging for storage at his own expense and with sponsorship from Fighting Chance and the Oregon Institute of Science and Medicine, David Ways now has possession of Alaska's former inventory of thousands of radiation meters and dosimeters. They will remain in his possession for distribution to the people of Alaska if they are ever needed.

We strongly recommend that Fighting Chance supporters in other states communicate with their state emergency preparedness office about similar possibilities. First, urge your state officials to continue the radiological meter inventory program under state auspices. Second, ask the radiological monitoring officials to allow you to take possession of the state meters if they are discarded. Talk with them occasionally so that you will not be forgotten if the need arises. In that event, if it is of help to have a sponsoring organization, please let us know. We can help in this way, as we did with David Ways. Since the Oregon Institute of Science and Medicine is a non-profit public foundation, meters stored by us remain public property.

For this storage of meters to be most effective, a civilian procedure must be developed to calibrate the meters occasionally. The current calibration devices include a radioactive source and belong to FEMA. Some of these are being returned to FEMA. It should not be difficult, however, to arrange a calibrating effort in the future. The most important priority is to **assure that the survey meters and dosimeters in your state are not destroyed**. Once they are destroyed, the expense of replacement will be far too great for an ordinary civilian effort. Each state has several thousand meters. They are compact and easily stored. If you cannot find space, we are willing to arrange to ship them to Oregon for storage at this Institute.

THE DEATH OF SOCIALISM IN EDUCATION

Failure of the United States to provide civil defense is not an isolated problem. We also have severe economic problems. These are the immediate result of the debasement of our currency and the squandering of our nation's wealth by decades of onerous taxation and regulation. Even our national military defense is decaying as the armed services are restructured to become heavily armed national and international policemen rather than defenders of our national borders and freedoms.

This trend is especially ominous because there has been a sharp increase in the use of American armed forces *within* the United States. This began with the use of military personnel to fight forest fires and provide disaster relief; was extended to include widespread use of the military in "drug wars" within the United States; and has now gone so far that questionnaires have been distributed to U. S. Marines asking about their willingness to kill American citizens who do not turn in banned firearms.

Politicians and the elite leadership are clearly frightened by the economic and social effects of their own past actions. The frenzied race toward gun confiscation is symptomatic of their fear. They expect to use increasing amounts of force to remain in power. Examples like their slaughter of innocent people in Waco can help keep Americans subdued, but extensive use of force against Americans will be difficult as long as they are personally armed.

How is it possible that such difficulties have come to the United States? Technological advances have been so remarkable that the real earnings of ordinary Americans should have more than doubled in recent decades – instead they have been decreasing since 1972. The purchasing power of our currency should be increasing along with decreases in the costs of production, instead the value of the dollar has *fallen ten-fold* since World War II. Our consumer and housing markets should be booming with demand from new American families. Instead, about 30 million members of those new families are dead – buried in the wastebins of the abortatoriums where they were murdered.

It is easy to write rhetoric about national decay. At Fighting Chance we have received literally thousands of newsletters, books, articles, and other materials written by concerned Americans about our nation's obviously severe difficulties. Under the Clinton administration, these publications have increased. Although William Clinton is an easy target, this corrupt individual and the human trash with which he has filled his administration are not our fundamental problems. What has happened in America that would allow the election of such people to high office?

It is important to understand that most economic, social, religious, and other human factors that affect our personal and national well-being are interrelated. Decay in one area leads to decay in other areas which in turn amplify the decay in the one. Likewise, improvements in one area can improve many other areas which in turn can further improve the one. Most writers tend to concentrate on one or two of these factors – blaming everything on them. Washington politicians are, of course, popular targets, since many of them are so obviously corrupt. The voters, however, elect these people. Why?

Our national life is like a long chain of individually motor-driven gears – some large, some small – all intermeshing with one another. This gear train can move forward on our behalf or backwards to our detriment. Which gears do we blame for the overall motion to which we object?

Actually, I doubt that *blame* is of much importance. Far more important is a correct analysis of the amount of leverage we are able to exert on each gear. We are not so interested in the reasons for the current motion as we are in being able to alter that motion on our behalf. We might find that gear “C” is the one with the greatest effect in pushing the whole train against our interests, but that we have little leverage to change gear “C.” Gear “H,” however, might be little to blame, but might be susceptible to great leverage with which we could overcome gear “C” and all of the others.

I have spent most of my life involved in research in biochemistry and medicine. I believed that, if my co-workers and I worked effectively, we could markedly improve the quality and quantity of human life. Although this is, in fact, correct in a limited sense, it is incorrect in a broader sense. Trends in American life are such that they threaten to erase all of the gains made by several generations of scientist and engineers, including our own.

Which then are the gears “H” – the ones with which we can have the greatest chance to reverse the trends that threaten all that our and previous generations of Americans have built? I think that these are “abortion” and “education.” With God’s help – and these are problems for which His help is very likely – abortion in America can be stopped and education in America can be entirely removed from government control and put back in the homes where it belongs. Moreover, it appears to me that each of these two areas is ready for change.

This readiness for change has been brought about by our enemies themselves. Successes in killing humans and socializing education have led to such extreme actual and projected programs that the fundamental human nature of the American people is causing them to view the current state of affairs with revulsion.

What sort of people spend their days actually working to promote the killing of innocent children? The same sort of people, it turns out, who also work to promote the killing of adults by euthanasia. Death is not a fundamentally popular cause. These merchants of death and their evil programs are ripe for national rejection. With leadership from the Judeo-Christian community, the national mood is changing – and change it must. There is not the remotest possibility that America’s many social problems can be solved if the legalized murder of millions of Americans is allowed to continue.

Similarly, socialism in education is almost ready for complete national rejection. The conditions that prevail in American public schools are now degenerate in the extreme. No child should be subjected to these conditions – much less be expected to learn to think in such an environment. Science professors in American universities are being confronted with lecture halls filled with 18- and 19-year-olds who literally cannot reliably perform simple arithmetic and whose attention span and mental training are entirely incompatible with independent thought.

Public school conditions are so deteriorated that the schools not only are not teaching students, but they are even degrading the students' fundamental ability to learn as measured by scholastic aptitude tests. Figures 1 and 2 below show this trend, while Figure 3 shows the socialized education response to it. Figure 1 is taken from the excellent book, *America: To Pray or not To Pray* by David Barton available from Wall Builder Press, PO Box 397, Aledo, TX 76008. Barton points out a correlation between the series of Supreme Court decisions removing prayer from America's public schools and the deterioration of those schools.

Since the Supreme Court now functions largely as a tool of politically correct social engineering rather than as a strict interpreter of the U. S. Constitution, it may be necessary to change American society before the Supreme Court bias against Judeo-Christian religion can be reversed. Barton is surely right about the importance of prayer in education. Prayers belong, however, in home schools. Socialized education cannot be entrusted with the spiritual health of American children.

Figure 2 is from *Access to Energy*, Volume 21, No. 7, March 1994 available from PO Box 1250, Cave Junction, OR 97523. This figure, adapted from Forbes magazine, emphasizes the correlation between

reduced student aptitude and the unionization of public school teachers and public school spending. The National Education Association, NEA, has become the largest labor union in America with 2.1 million members and a direct income of \$750 million per year. It also has become the most powerful arm of the Democratic party with power to dictate the choice of Presidential candidates and enormous ability to influence elections.

The NEA cannot easily be dethroned, nor should opponents of socialized education necessarily want this. Power has so corrupted NEA leaders that they have adopted an incredible agenda of anti-God, anti-freedom, anti-American causes which is repulsive to the vast majority of the American people. Having helped to wreck government schools, the NEA is an ideal high-visibility, generally-disliked target for those who are working against socialism in American education. If they were not there, it might be useful to invent them.

Figure 3 is from *Science* 265 (1994) p 1030. It illustrates the response of socialized education to the falling SAT scores of American children. The SAT tests have been renamed (they

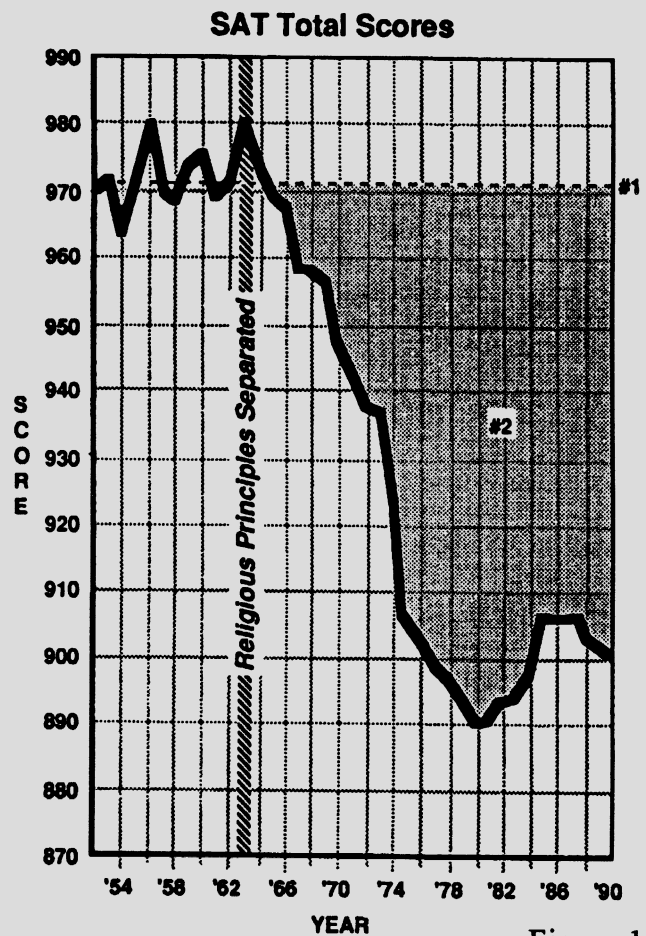


Figure 1
 #1 - Average achievement level prior to the separation
 #2 - Amount of reduced academic achievement since the separation

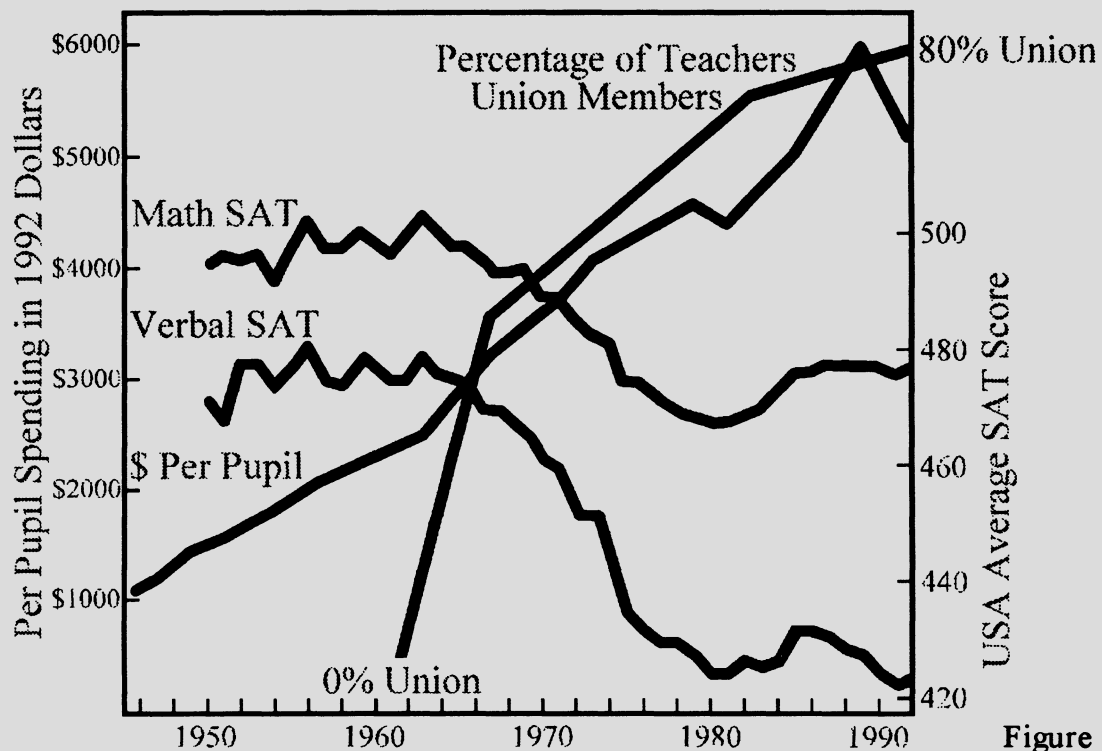


Figure 2

are now Scholastic Assessment Tests rather than Scholastic Aptitude Tests); the questions have been dumbed-down; and the test scores will be “recentered” after April 1, 1995. This latter procedure arbitrarily shifts the scores upward by the amount that they have fallen in recent years. For example, a raw score of 52 on the verbal test is given a final score of 530 at present. After April 1, 1995, this same raw score will be given a final score of 600.

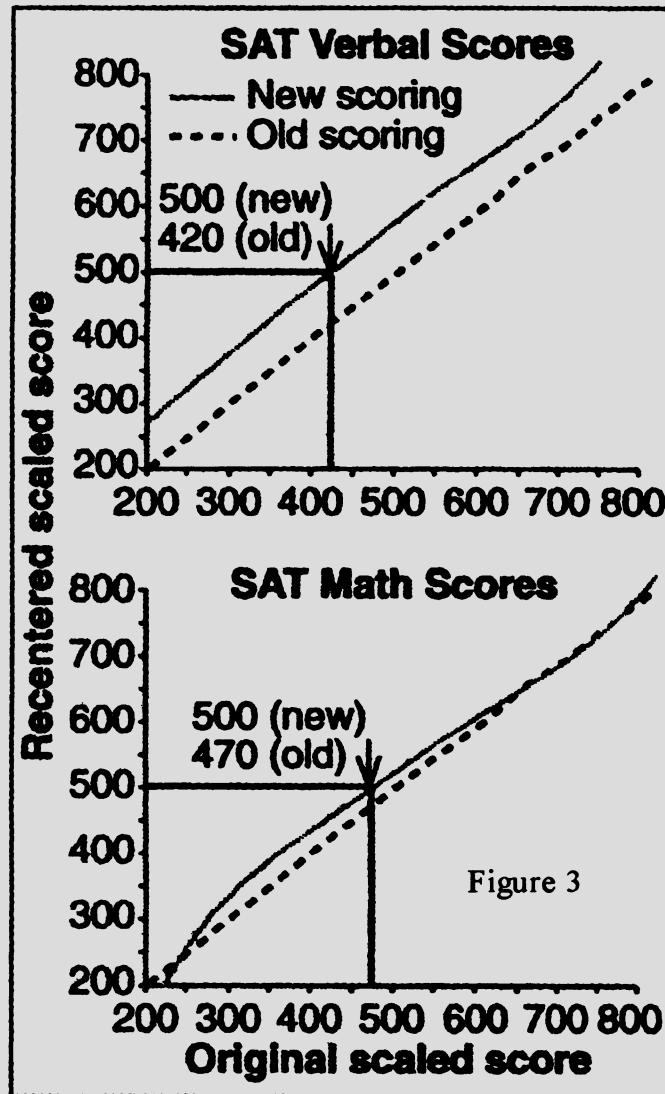
An uneducated population that cannot think is not likely to be able to repair the American nation or even stop its further decline. Socialized schools cannot be fixed, nor should we want them to improve. At this point, our nation would be best served by the complete elimination of so-called “public education.”

There is good reason to believe that this can now be accomplished. It is estimated that about one million American children are now educated in their homes – entirely outside the socialized system. During the past decade, most legal impediments to this movement have been swept away, although the home school legal organizations must still receive active support to respond to new legal efforts by socialists.

Political efforts to stop home schooling are still being made. During this last session of Congress, a bill requiring certification of home-school parents was very close to becoming law. An extraordinarily impressive effort, however, by the nationwide networks of home school parents was so effective that, when a vote was finally taken, only one Congressman (its NEA

sponsor) dared to vote for the bill. The political power of the home school movement now exceeds the power of the NEA and is growing rapidly.

During my presentation at the recent annual meeting of Doctors for Disaster Preparedness (tapes are available from DDP at 1601 N. Tucson Blvd. Suite 9, Tucson, AZ 85716), I was asked a question regarding an idea for improving performance of public schools. I found myself answering that I don't want those schools improved; I want them abolished.



This uncharitable view responds to the enormous damage that has been done to American children and the American nation by socialism in education. This cancer must be removed so that it can no longer threaten our nation's life.

If public schooling survives, it will probably be because most of the American people are basically decent human beings who prefer compromise to confrontation. They know that there are many good teachers who try to do their best for the children regardless of the socialized schools in which they are entrapped. (These are the teachers who will be hired by parents as tutors and by private schools if the socialized system collapses.) Many Americans also have a poor understanding of the effectiveness of a free market and the charity of their fellow citizens. If all public schools closed tomorrow, within three months more American children would be learning more educational material than are doing so today, and American education would go straight up from there. Where home schooling is impossible for a disadvantaged child and his family has no resources with which to pay for private

school, the child would be educated anyway just as hospitals in America would never turn away a sick child regardless of ability to pay.

The people of the United States should no longer tolerate the abortatoriums that kill the bodies of American children nor the socialized institutions that kill their minds. If we stand uncompromisingly against these evils, our Lord will stand beside us. If we compromise with these evils, He will probably be against us in all else that we attempt to do.

HOME SCHOOLED HIGHER EDUCATION

Although it is estimated that there are, at present, about one million home-schooled American children, most of these children are relatively young. Only a small fraction of families have been home schooling for 12 years (or more) as has our family. Some families have taken their older children out of public schools and begun home schooling, but these are also a small fraction of the total.

As this small number of young adults becomes of college age, they and their families face a serious problem. If the children avoid college, then part of the modern world will close for them. It is wrong that a college degree (and often even a graduate degree) is required for many sorts of work in our society, but that is the way it is. We are powerless to change this fact in time to help these children. On the other hand, the immersion of Christian children into the socialist cesspools of most colleges and universities is unthinkable to many parents. There are a few Christian colleges with acceptable reputations in the liberal arts, but first-rate Christian colleges of engineering and science are essentially non-existent.

This will not always be the case. As the number of home school graduates grows, the free market will respond to this demand. Ten years from now there will probably be many more acceptable on-campus opportunities available. It is also to be expected that home school university degrees with good accreditations will become increasingly available. In the physical sciences, these home school programs will probably be combined with organized apprenticeship programs in science and engineering – a situation that would be markedly superior to the academic opportunities available today in most of the best secular schools.

Our family is currently struggling with this problem. Zachary is 18, his brother Noah is 16, and their sister Arynne is 14. For the younger children, Joshua and Bethany who are 12 and Matthew who is 7, there is reason to hope that more opportunities will be available, but the oldest three children face the system essentially unchanged. So far, we are managing to use the superior quality of early home school education to eliminate part of this problem and postpone or mitigate the remainder.

First, Zachary took the PSAT and SAT tests scoring 1480 and 1440 respectively. (The 1480 was the 5th highest score in Oregon, but, although he was a National Merit Finalist, Zachary was not given one of the approximately 60 National Merit Scholarships awarded in Oregon. The National Merit selection process is strongly weighted against children who have not attended an ordinary school.)

Second, we chose a university close to home. In our case, the available choices were the University of Oregon and Oregon State University, OSU, (both about a four hour drive from our farm). OSU has a reputation as having fewer socialist and communist professors and a less depraved campus life, so Zachary chose OSU.

Third, Zachary took nine College Board Advanced Placement examinations. (These can be arranged at most public schools. Since usually only two or three are given at a school, it may be necessary to pay for examination proctors. In our case, examination and proctor fees totaled about \$700.) He took most of the examinations available even though he had completed for-

mal course work in only three of the subjects. (Be sure the child can write an essay. Zachary wrote 30 essays in the course of these exams – many even in the sciences.) These exams were a mine-field of social engineering. On one anti-Bible biology topic (comprising about one-sixth of the biology examination grade) Zachary simply wrote a note refusing to write the essay. The English literature exam was entirely questions and essay writing on politically correct reading passages – not one of which ever mentioned a great work of English literature.

Advanced placement is awarded on the basis of a standard scale. In Zachary's case, OSU awarded him advanced placement in calculus, mechanics (physics), electricity and magnetism (physics), chemistry, biology, European history, and English - seven of the nine subjects he attempted. These comprised 67 units of the total 191 required for graduation with a BS in chemistry, so he is 35% finished with his initial college education before he starts.

Fourth, we arranged for Zachary to begin apprenticeship research work in the laboratory of a colleague during this past summer. OSU agreed, in view of his test scores, that he could continue his research work both here and in the other laboratory during this coming year. Assuming his results and reports are satisfactory, he will receive 15 units toward graduation for this research.

Fifth, with the help of OSU faculty, a course schedule was arranged that will allow Zachary to complete all remaining course work (primarily chemistry courses) in six quarters (two academic years) at OSU. By postponing those two years with two years of research, Zachary and Noah (who will probably choose to do the on-campus part in the early years) will be able to attend the university together and will be there as a help to their sister Arynne when she begins.

Finally, through the capabilities of 2-meter ham radio, we intend to establish a repeater link, so that each young adult can carry a pocket-sized radio at OSU that links them 24-hours per day to all of their other family members both at OSU and in Southern Oregon.

This procedure leaves about 66 weeks of on-campus time for which we have no present solution. One advantage – virtually all of the humanities requirements for scientists can be completed by advanced placement (take the exam a second year, if you don't pass the first). Humanities courses are the most academically decayed part of university educations. The humanities exams are intellectually bankrupt, but they beat sitting through a whole course.

If we could do it, we would build a home school university for science students – correspondence work at home coupled with an apprenticeship program. In order for such an enterprise to award degrees that have real value, however, it must be done on a scale that is far beyond our family's financial resources.

For the time being, each family must solve this problem as best it can. Perhaps our ongoing experience will provide some help. One caution! Think very carefully before omitting college or choosing a college without good establishment credentials. Such a decision has permanent and pervasive consequences for the young man or young lady involved. It is very difficult to predict the entire course of one's life. It is fine to hope that a life can be arranged so that one's work and not one's credentials can always speak for him. This is an ideal, however, that cannot always be achieved.

Oregon Institute of Science and Medicine

The Oregon Institute of Science and Medicine is a small research institute in southern Oregon. It was founded in 1980 to conduct basic and applied research in subjects immediately applicable to improvements in human life – especially in biochemistry, diagnostic medicine, nutrition, preventive medicine, and the molecular biology of aging.

The Institute is entirely supported by donations and the independent earnings of its faculty and volunteers. It does *not* solicit or accept tax-financed government funds.

The Institute has six senior faculty members, about fifteen volunteers who work actively on its projects, and a larger number of volunteers who help occasionally. It owns a 10,000 square foot building located in a rural setting about 7 miles from the town of Cave Junction in southern Oregon. 3,000 square feet of this building is now used for research, while an additional part is currently being modified for use as laboratories.

This facility and a modest complement of research equipment are the Institute's principal physical assets. The Institute has no debts and a policy of incurring none.

At present, work is proceeding on several specific projects including the effects of atmospheric carbon dioxide levels on health and longevity of mice; the role of protein amides as molecular timers of protein turnover, development, and aging; the use of urine and blood profiling for predictive and preventive medicine; the development of comprehensive materials for use in home school education; and the production of educational materials for civil defense. The Institute's most recent scientific publication reports experimental work on nutrition and cancer.

The research and development work of the Institute is carried out to the full extent permitted by donations that it receives. The Institute is classified by the IRS as a 501(c)3 public foundation, so all donations are tax deductible.

Faculty

- Professor of Chemistry Martin D. Kamen. Dr. Kamen is the discoverer of Carbon 14 and the originator of many of the techniques by which radioactive tracers are used to elucidate the chemistry of biological processes. He also carried out extensive research that underlies much of our understanding of the process of photosynthesis. For his discovery of Carbon 14 and work on tracers, Dr. Kamen has been nominated several times for the Nobel Prize in Chemistry.

- Professor of Biochemistry Fred Westall. Dr. Westall is an expert in the biochemistry of immunology and autoimmune disease. He was educated at the University of California at San Diego and then moved to the Salk Institute where he became director of laboratory work for Jonas Salk. Dr. Westall's current interests include research on the statistical implications of distributions of DNA and protein sequences and applications of protein chemistry to immunology.

- Professor of Electrical Engineering Carl Boehme. Carl Boehme founded a computer engineering company in the Silicon Valley near Stanford where he was educated. This company designed and produced computer hardware and software and sold computer equipment. As a result of his company's successes, Carl retired at an early age to work on various personal and technical projects. He provides computer hardware and software development and support for the Institute's research and supervises part of the laboratory development.

- Adjunct Professor R. Bruce Merrifield. Dr. Merrifield is the originator of solid-phase peptide synthesis with which he accomplished the first laboratory synthesis of an enzyme. In recognition of these accomplishments, he was awarded the Nobel Prize in Chemistry in 1984. Dr. Merrifield is Emeritus Professor at Rockefeller University where he directs a group of scientists working on various aspects of the development and application of solid phase synthesis in protein chemistry.

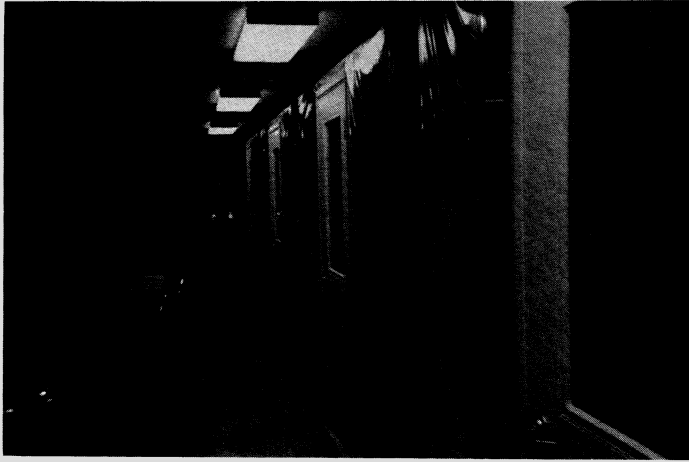
- Professor of Clinical Medicine Jane Orient. Dr. Orient is a specialist in internal medicine. In addition to her private practice of medicine, Dr. Orient is well known for her work as an advocate of national civil defense with Doctors for Disaster Preparedness and Physicians for Civil Defense. As Executive Director of the Association of American Physicians and Surgeons, she also leads a nationwide effort for more free enterprise and less socialism in medicine.

- Professor of Chemistry Arthur B. Robinson. Dr. Robinson conducts research on protein chemistry and on nutrition and predictive and preventive medicine. He also works on civil defense and on development of home schooling techniques and edits the newsletter *Access to Energy*. Dr. Robinson was a faculty member of the University of California at San Diego and was President and Research Director of the Linus Pauling Institute before founding the Oregon Institute of Science and Medicine with his wife Laurelee, who was also a scientist.



Drs. Robinson, Kamen, and Merrifield

Carbon Dioxide and Animal Health



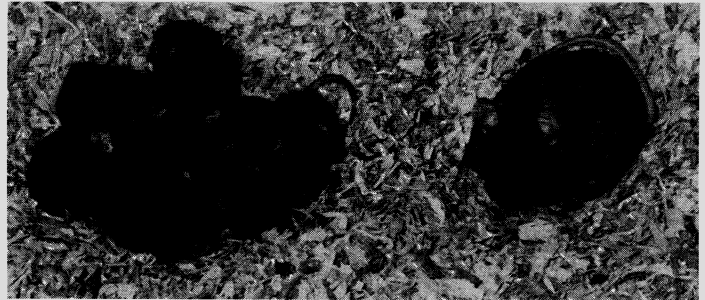
One unexpected environmental change during the 20th century has been the increase in amount of carbon dioxide in the earth's atmosphere. Since 1900, atmospheric carbon dioxide has increased about 70 parts per million or about 25%. This increase is believed to be the result of release of below-ground carbon from the burning of coal, oil, and natural gas.

This increase in carbon dioxide has caused a marked acceleration in the growth rate of vegetation. It is estimated that the world wide inventory of plants has increased by over 20% during this century. Trees are affected more than most other vegetation. The amount of standing timber in the United States has increased by about 25% since 1958. The nation currently has 120,000 pounds of standing timber for every man, woman, and child. This amount is increasing at the rate of 600 pounds per person per year.

Along with this remarkable increase in plants has come a corresponding increase in the amount of animal life. This lush increase in plant and animal life is expected to continue (as more coal, oil, and natural gas are burned), so that the quantity of plants and animals is likely to double during the 21st century.

It is not known, however, what effect this increase in carbon dioxide may have on the health of individual animals or upon individual human health.

The Institute's scientists are conducting, therefore, a series of experiments to determine the effect of increased atmospheric carbon dioxide on the health and longevity of animals. The pictures show the Institute's 1,000 square foot mouse facility in which mice are being raised in isolated chambers wherein carbon dioxide is regulated at different levels. These experiments have been in progress for about two years and are expected to yield their first completed results during 1995.



Molecular Clocks

Two of the 20 ordinarily occurring amino acid residues in peptides and proteins are inherently unstable in physiological solutions. These glutaminyl and asparaginyl residues undergo deamidation to become glutamic acid and aspartic acid residues under both laboratory conditions and also in the cells of plants and animals. It was originally proposed by Dr. Robinson that deamidations of these residues may serve as molecular clocks by which the processes of protein turnover, development, and aging are timed in living things.

It has since been shown that deamidation

of glutaminyl and asparaginyl residues can control widely different timed intervals by means of different genetic variations in protein primary and three-dimensional structure. It has also been discovered that deamidation controls the turnover rate of some proteins in living things. Institute scientists have published a substantial amount of original research on this subject and are continuing to work toward a further understanding of deamidation and its potential role as a fundamentally important molecular clock for the regulation of biological processes.

