

Frankenstein Foods

By Michael Mannion

Introduction:

300,000,000 Guinea Pigs

Modern agribusiness has brought wonderful things to your dinner table:

- Potatoes that grow their own poisons
- Tomatoes that are part deep sea fish
- Grains that kill butterflies
- Milk that is awash in antibiotics

The giant “Supermarkets to the World” that control our food supplies are proud to provide Americans with foods that have been radically altered by biotechnology. But not proud enough to tell you about it openly.

It is not a “brave new world” of agricultural science that we now encounter, but a “cowardly new business world” in which corporate executives use their financial clout to get from the politicians what it knows the public would overwhelmingly reject: acceptance of the genetic modification of our food.

Fifty years ago, the world of food was radically different.

As a child, growing up The Bronx in the early 1950s, I loved the intense, delicious tastes of fresh food. I remember the flavor, texture and aroma of tomatoes in the summer. The deep red of the skin, the rich fruit itself, and the tangy tomato juice that thrilled my taste buds and dripped down the side of my mouth, were all exciting. If I relax and close my eyes, I can still smell the sweet ripe corn on the cob. Ripe raspberries, succulent strawberries, and wet juicy watermelons were also wonderful summer treats.

I also recall the milkman delivering bottles of milk and cream to our apartment straight from dairies in upstate New York before dawn. I can still see produce trucks rumbling along the cobblestone streets carrying eggs from New Jersey on Tuesdays and Thursdays, potatoes from Long Island, and all kinds of vegetables from farms just outside the city.

The foods we ate were grown nearby. There was no air conditioning to keep produce cool as it journeyed from farm to city or as it sat on the shelves in the grocery stores and supermarkets. For years, I had a part-time job in a small grocery store and learned how short was the “shelf-life” of fresh food.

Of course, as a youngster, I wasn’t only interested in healthy foods like fruits and vegetables. One of the great tragedies of the summer was that from June through September, most stores did not stock my favorite cookies, Mallomars. The chocolate-

covered marshmallow delights couldn't stand up to the hazy, hot and humid New York summers in the days before air-conditioning.

However, by the late 1950s and early 1960s, my delight in certain foods began to wane. As a child, I did not understand why. Tomatoes were no longer luscious and flavorful. They were bland-tasting and pulpy. And the rich red color of the skin had become pale. Some were even square and fit snugly into plastic containers. They no longer even looked inviting.

Strawberries, too, lost their appeal. The sweetness was almost entirely gone. This phenomenon applied to ever increasing numbers of fruits and vegetables as the years passed. I did not understand why this had happened. I simply lost interest in many foods I had once loved.

Looking back, I now understand that during my childhood, industrial agriculture—or what we now call agribusiness—had begun to eliminate the small local farms. Food was coming from large farms that were farther away. It was being grown, harvested and shipped under conditions that were radically different from only a few years before.

In high school and college during the 1960s, I became acquainted with so-called “health nuts,” those “kooks” who urged anyone who would listen to eat natural foods. These well-meaning but seemingly fanatical people were ridiculed for their ideas and intensity. I began to read about the adulteration of our foods with pesticides and other agricultural chemicals, as well as with nitrites and nitrates, a range of preservatives, and artificial flavoring and coloring. I learned about the processes through which mass-produced foods were made, industrial processes that depleted natural foods of much of their vitamins, minerals and other necessary nutrients.

It seemed obvious that while “Big Government” may have been quite busy collecting taxes and promoting such enterprises as the Vietnam War, government bureaucracy did not seem to be doing much to protect the food supply of the American people. I wondered what the U.S. Department of Agriculture, the Food and Drug Administration and other government agencies were doing to ensure that Americans had healthy, nutritious foods.

It was not until I began studying the work of the physician-scientist Wilhelm Reich as a college student that I came to learn about the role that the Food and Drug Administration has played in U.S. history—and still plays today. The dramatic story of Wilhelm Reich is not an agricultural story but the 10-year long FDA campaign against him—which ended in Reich's imprisonment and the burning of his scientific and medical literature by Federal court order—is an important example of the FDA's dishonest pattern of promoting the profits of the food and drug industries at the expense of public health. (More information on the FDA attack on Wilhelm Reich can be found in *Wilhelm Reich vs. The USA* by Jerome Greenfield and *The Chemical Feast: The Ralph Nader Study Group Report on Food protection and the Food and Drug Administration* by James S. Turner) This pattern of behavior is clearly evident today in the FDA's attitudes and actions concerning genetically modified foods.

It was through my investigation of the FDA's role in destroying Reich's valuable medical and scientific work that I learned a great deal about the regulatory agencies that preceded the Food and Drug Administration, the origins of the FDA, and its history of questionable, if not unethical and illegal, actions. It is evident from the historical record that for nearly 100 years, the U.S. regulatory agencies have produced rules and regulations that were designed to give the public the impression that its health was being safe-guarded whereas, in actuality, agencies such as the FDA were instead protecting and promoting the very industries they were supposed to oversee.

Years ago, when I was a writer for a governmental health agency, I sat in on a meeting at which a government regulator reassured those whom he was supposed to be evaluating, "You needn't be worried about my presence here. My job is simply to come here and overlook everything." No one at the meeting acknowledged his revealing slip of the tongue. The man's job was obviously not to overlook what was going on, it was to oversee the operations of the health clinic and evaluate them. The attitude expressed in the malapropism above is applicable to the FDA's relations with industry because the FDA all too frequently overlooks what is going on in the industries it is mandated by law to regulate, rather than providing real oversight that protects the interests of the public.

A brief look at the history of attempts to regulate foods and drugs in the U.S. will help put the current controversy over genetically modified foods into a context in which it can be better understood. The well-known observation of American philosopher George Santayana—that those who remain ignorant of history are condemned to repeat it—is especially appropriate here.

In 1906, after 25 years of futile attempts to bring about legislation to protect the public health, Congress passed the Food and Drug Act. Within three months of the passage of this legislation, the pure food law began to be undermined by the very government officials whose legal duty it was to carry out the provisions of the Food and Drug Act.

Congress had given the Bureau of Chemistry the authority to determine what constituted violations of the new law and to set up the technical standards for the new Food and Drug Act. It was thought that the Bureau of Chemistry was less likely to be influenced and corrupted by ties to industry. When this turned out to be true, industry complained. Under intense lobbying pressure, members of Congress and President Teddy Roosevelt created other regulatory bodies &150; whose members had strong ties to industry. These other advisory boards were allowed to illegally usurp the authority of the Bureau of Chemistry, which was run by the honest and forthright Dr. Harvey W. Wiley.

Dr. Wiley was a determined and uncompromising defender of consumers' rights. It was his view that the public should be protected from all adulterants and preservatives that might be harmful. Within a short period of time, Dr. Wiley and his team of honest scientists were completely removed from the picture. Dr. Wiley's little-known book, *History of a Crime Against the Food Law* tells the story of this betrayal of the American people by their elected officials and those who were appointed to positions of authority in the U.S. Government. It

is a story that is being repeated with slight variations to this day.

In 1933, a book by Arthur Kallet and F.J. Schlink, both of Consumers' Research, Inc., was published—100,000,000 Guinea Pigs: Dangers in Everyday Foods, Drugs and Cosmetics. The American public was shocked and outraged by the information contained in this explosive expose. Kallet and Schlink said that “This book is written in the interest of the consumer, who does not yet realize that he is being used as a guinea pig...”

The guinea pigs in question were angered by the dangers to which they were exposed and an aroused citizenry forced an unwilling Congress to confront its commercial benefactors. Along with a major tragedy, in which over 100 innocent people died after taking an untested new drug, 100,000,000 Guinea Pigs helped the proponents of legislation to protect the public defeat the large pharmaceutical and food companies and gain passage of the 1938 Food, Drug and Cosmetic Act.

In their foreword, the authors note that their study “could have been carried out far more effectively by those on the inside—by food and drug commissioners who have watched self-serving businessmen and politicians in the act of breaking down the regulatory system. These men know the whole sad story—but no one of them has yet cared or dared to tell it.”

According to the authors, the legal forms of consumer protection existing in the 1930s had failed. They noted that the “propaganda agencies of business” (a more accurate description of what we now call “public relations” or “corporate communications”) were then hard at work conditioning the public to trust the food and drug manufacturers to keep health and safety issues paramount. The authors also questioned the value of statements made by scientists who vouched for the safety of products, citing the example of a dean of the College of Pharmacy of Columbia University who had vouched for the safety of a drug that later proved fatal to many. In addition, the writers wondered how much trust can be placed in publications that carry advertising for food and drug products. Will such publications skew stories to favor their advertisers, they asked.

Kallet and Schlink pointed out that “If there is to be an end to the wholesale poisoning of the public by food and drug manufacturers, the relationship of enforcement officials to both the manufacturers and the public must be clearly understood and continually in plain view.”

Nearly forty years later, in 1972, John G. Fuller published his expose of the food, drug and cosmetic industries, honoring Kallet and Schlink by entitling the book 200,000,000 Guinea Pigs. In the Introduction, Fuller wrote, “Today, nearly forty years later, the situation is worse, not better...Time bombs are ticking away in several dark corners...It is 1933 all over again—multiplied by logarithms. The difference is only a matter of form.”

Today, almost 30 years after Fuller's wake-up call, the situation has deteriorated even further. Pesticide and insecticide use rose dramatically during the Reagan-Bush years and the resulting poisoning of our food and water grew even more rapidly during the eight years of Clinton-Gore, the alleged environmentalists. There are now nearly 400,000

prescription and over-the-counter drugs available and the FDA has made “fast-tracking” these products to the market its priority, not safety. Many are unaware of the pollution of our foods and environment that is caused by pharmaceuticals.

How bad has it gotten? The U.S. Department of Agriculture recently proposed regulations that would allow foods grown in soil contaminated with toxic heavy metals or fertilized with sludge containing nuclear waste to be labeled as organic! No, this is not something from a Saturday Night Live skit or from Mad Magazine. This was actually proposed by the Secretary for Agriculture under President Clinton. A massive public outcry forced the USDA to back down. But the industry is still working behind the scenes to get the USDA to make rules to allow adulterated products—including genetically modified foods—to use the word “organic” in their labeling.

In a way, this book could be called 300,000,000 Guinea Pigs. The citizens of the United States are now part of the largest uncontrolled experiment ever conducted—the genetic modification of our foods. This experiment has been undertaken without our consent and without our knowledge.

For the last 25 years, I have been a professional medical and health writer. When I began writing this book, I was stunned to discover that about 70% of the food I was eating had already been genetically modified. I was paying attention (or so I thought) and yet was completely unaware of how far agribusiness had gone in radically transforming our foods. The information gained while researching this book woke me up. Knowledge can often bring about rapid changes in individuals but society changes more slowly.

Unfortunately, it took tragedy to awaken Americans to the need for food and drug safety regulations in 1906 and again in 1938. It took the thalidomide tragedy in the early 1960s to demonstrate the need for drug safety testing. Must it take tragedy yet again to open the public’s eyes to the true nature of the genetic modification of the food supply and its potentially devastating consequences for both individuals and the environment?

The proponents of biotechnology in general, and the genetic modification of foods in particular, try to dismiss those who raise questions about this technology as either “Luddites” (those who fear and resist inevitable technological advancement) or as “doom-and-gloom” Chicken Littles who are hysterically warning that the sky is falling. Those promoting this untested technology declare that biotechnology will usher in a new “Golden Age.” They make broad sweeping claims, promising that the genetic modification of food will end world hunger, cure millions of illness, raise billions from poverty.

It is even claimed that it is these lofty, humanitarian goals that motivate the big biotech companies to pursue the genetic modification of food! It is altruism, and not the vast profits that can be made by controlling the food supply of the world, that is the driving force behind the giants of agribusiness. Nothing could be more absurd! In reality, consumers are expected to believe, agribusiness wants to cure rare eye disease prevalent among the poor in India; to lift the impoverished in Asia and South America from poverty by helping them become “entrepreneurs” who grow genetically modified foods on their own small farms.

And, of course, the giants of agribusiness are deeply concerned about protecting the many farms in America now owned and operated by single-moms, as portrayed in their PR ad campaign.

Or at least this is what the PR shills orchestrating the current \$50 million “Why Biotech?” propaganda campaign want Americans to believe. However, everyone knows what the bottom line is in business—and it is not helping the impoverished of the world or curing the illnesses of the poor.

The sweeping claims made by proponents of genetically modified foods have a familiar ring to them. They are not new. Similar broad, unsubstantiated claims have been made in the past for other new technologies, for example nuclear technology.

At first, it was believed that nuclear weapons would put an end to war. Instead, in the years between 1945 and 2000, about 23 million people (two-thirds of whom were civilians) were killed in hundreds of wars that erupted all over our planet. When John F. Kennedy warned of a “missile gap” in his 1960 presidential race against Richard Nixon, both the United States and the Soviet Union had only a handful of nuclear bombs. Within 20 years, each side had 24,000 thermonuclear weapons. These weapons of mass destruction have proliferated worldwide. The weapons themselves and the waste products from the creation of the weapons pose enormous threats to our survival.

It was later asserted that the peaceful, civilian use of nuclear power would provide energy to consumers, business and industry that would be too cheap to monitor. Instead, we have 109 aging civilian nuclear power plants in the United States, ticking time bombs that produce the most expensive energy available and create thousands of pounds of toxic waste that will remain lethal for 250,000 years.

It was also claimed that nuclear technology would bring about miracles in medicine, such as the cure for cancer. Although nuclear radiation has caused many cases of cancer, nuclear medicine has not produced a cure for cancer; more people now contract cancer and die from it than ever before. And the medical nuclear waste generated contributes to the problems we face.

No human society has lasted longer than 1000 years without major disruption, so safely storing the nuclear waste from military, medical and civilian programs is just one of the many problems we now face because of our pursuit of nuclear technology.

The proponents of nuclear technology were aware of the many life-threatening, unsolved problems associated with the scientific path they were taking. They did not tell the public the truth. Documents from the period show that the proponents of nuclear science understood that the public would stop them dead in their tracks if it knew the truth. Instead, they chose to embark on a public relations campaign to mislead and deceive the public.

There are troubling similarities between the public relations effort that brought us the

nuclear fiasco and the PR efforts now underway to make Americans believe that the genetic modification of food is beneficial to them.

There are many other examples of technologies that promised more than they could deliver—except the promised profits to the stockholders. For example, the chemical industry has established its dominance worldwide in the 20th century. This explosion of chemical technology dazzled consumers with a myriad of miracle products, yet it simultaneously flooded the natural world with toxic substances on an unprecedented scale. Innumerable places on earth are now contaminated and there is always the danger of a catastrophic chemical explosion, such as occurred in Bhopal, India on December 3, 1984, in which 2,000 people were killed and 200,000 others were injured. The industry is still delaying making payments to those who suffered at Bhopal, choosing instead to spend large sums tying the matter up in courts for years on end.

Along with the benefits derived from synthetic chemicals, we now find toxic waste dumps littering the American landscape from coast to coast. And there are very few areas of the world that do not face difficulties because of toxic chemicals in our foods and toxic chemical wastes which pollute our air and water. It can be safely assumed that every living organism of earth is affected by industrial chemicals. The chemical industry has also played a destructive role through its participation in producing chemical weapons of mass destruction, such as nerve gas, for military use by nations around the world.

Chemotherapy was also going to lead to a cure for cancer. It has not and despite the propaganda of the cancer industry, the fact remains that after all of the billions and billions of dollars spent, chemotherapy helps only 2-3% of all people with cancer.

Unfortunately, there is no end to this brief listing of dangerous technologies and their consequences. They are discussed here because many of the same techniques that were used to mislead the public about the safety and desirability of earlier technologies are being employed to promote biotechnology and the genetic modification of foods. Technology is not a “magic bullet.” It is used by people, for good or for ill. Too often, those who develop new technologies are blind to their potential harm because of their emotional and financial interests in the application of their work.

We have a long history in the United States of having scientists and physicians &150; who are paid by industry &150; appearing as guests on TV and radio shows, or being interviewed in newspaper and magazines stories, posing as independent researchers. These industry flacks with degrees travel around the country on well-planned and heavily financed publicity campaigns, reassuring the public about a particular new scientific development.

They know they work for the industry involved. The producers of the shows knows who they are, as do the hosts. The writers and editors know who these people really work for because they usually learned about them from the corporate PR agencies in the first place. The only people who do not know what is going on are the viewers, listeners and readers.

In the 1980s, I worked as a freelance writer on a publication for physicians about the use of beta blockers to treat heart disease. When the assignment was completed, some of the staff and the physician in charge of the project went out to lunch on our last day working together. That evening, I saw the same physician introduced as a guest on a local news show. I listened, expecting him to talk about the medication we had just finished writing about. Instead, he spoke about another type of drug, calcium channel blockers, and downplayed the effectiveness of beta blockers. I didn't understand at first but then I realized—his contractual relationship with the manufacturer of the beta blocker was finished. He now represented the competition! What a change between two o'clock in the afternoon and five o'clock in the evening.

The biotech industry is engaged in just such a dishonest campaign now, called "Why Biotech?" Misleading ads are appearing in local and national newspapers and magazines; "op-ed" pieces are being ghost-written for physicians and scientists by public relations firms; "letters to the editor" are being planted; and speakers in the employ of industry are being booked as guests on TV and radio shows without their financial connections being made clear.

What is the point of this biotech PR campaign? To deceive you, plain and simple. Every poll taken shows that when people know the facts about the genetic modification of food, they reject it overwhelmingly. This has been demonstrated around the world.

For all intents and purposes, the battle over genetically modified foods is over in Europe. The consumers have defeated the giant agribusinesses. The people of the European Union were informed about the facts concerning this technology and rejected it by large majorities throughout the Continent and the British Isles. In fact, in the United Kingdom, the employees of one of the major companies involved in genetically modified foods have banned GM products from the company's own cafeteria. They refuse to eat it.

In Japan, because people are learning about the potential harm for agricultural biotechnology, there is growing public concern over genetically modified foods. As a result, the Japanese government is being forced by its people to require the labeling of genetically modified products. The biotech industry fears labeling because it knows that people do not want its products and will not buy them.

A fierce battle is being waged in Brazil over genetically modified foods. Brazil is vital to the global plans of the transnational agribusinesses. Without Brazil, their high-stakes game is over. Powerful political forces are fighting hard to win the day for the biotech industry against citizen, consumer and scientific organizations which are struggling to protect their food supply.

In France, Scotland, England and other countries citizens have destroyed test farms where genetically modified plants were being grown on a trial basis. Protestors have been wearing T-shirts with such slogans as "The world is not merchandise and neither am I!"

Until recently, Americans have been kept in the dark about this tampering with their foods.

The New York Times and the other major papers; the two major national news magazines, the three TV networks and major cable outlets were basically silent about the issue, except for their technology, business and financial coverage. Although a few stories appeared, there was no focus on the implications of genetic modification of foods for consumers.

However, this is beginning to change. The demonstrations in the streets of Seattle at the end of 1999 showed the passion and determination of those who do not want this technology jammed down their throats—quite literally, in the foods they eat. The demonstrators in Seattle came from all sectors of society to make their voices heard because they understand that biotechnology and what is now called “globalization” are inextricably linked. They recognize the profound impact that globalization will have on their lives and the lives of their children and grandchildren.

On the talking head TV shows and the radio talk shows; in the “op-ed” pieces and letters to the editors sections of newspapers and magazines; on the lecture circuit and on the Internet, globalization is often referred to a “force.” In fact, in the discussions of globalization and the “new” economy, many forces are referred to: “the forces of globalization;” “market forces;” “economic forces;” and “political forces.”

These “forces” are discussed as if they were objectively existing natural phenomena such as hurricanes, earthquakes, sunspots or gravity. It is interesting to note that schizophrenics often speak of “the forces” as well. Many patients report that they have engaged in certain behaviors because of the influence of “the forces.” Frequently, it is claimed that they behaved in a violent or self-destructive way because they were instructed to do so by “the forces.” A good many tell of their inner struggles to resist “the forces” and to refrain from harmful actions to themselves or others. But “the forces” are too powerful to resist.

When I listen to politicians, experts in the pay of industry, academics at the service of the economic elite and others on the public scene discuss “the forces” of globalization, of the market or of the economy, I am reminded of the words of the delusions of schizophrenics. All of these “forces” are the creations of human beings. It is a delusion to think that these “forces” exist independently of human beings. The “forces” are the materialization of the ideas of a few thousand men and women. When put into practice, these ideas have a global social impact because of the actions of an energetic and motivated few and, more importantly, because of the helplessness and passivity of billions of people on Earth.

“Globalization,” as conceived by those in power in transnational corporations and private international organizations such as the Council on Foreign relations or The Trilateral Commission, is not an inevitability. Their conception of “One World” in which the top one-half percent of the population owns wealth equal to 95 percent of the people on Earth is not preordained. Yet, this state of affairs already exists to a great extent. Why? It is the inability of people all over the world to take responsibility for their own lives that makes it possible for a few to do great harm.

What can be done about this?

Do you want to create the world you live in? Do you want to determine the structure of your work life, your love life, and your family life so that they meet your innermost needs? Your life is in your own hands. These choices are yours to make. Do you know that? Or have you forgotten that this is your life, to make of it what you wish? Our lives are in our own hands, but too many of us have forgotten this truth. This world is your world. Your life is yours to cherish and nurture.

Unfortunately, we do not live that way. The drumbeat of the day is that the world belongs to an economic elite, to the powerful, or to the politically influential. The mass media flood the airwaves, newspapers and magazines with propaganda, disguised as news and entertainment, suggesting that the world belongs to the great transnational corporations and the wealthy one percent that dominates the new “global economy.”

“They” make the decisions about the economy, about government, about international finance, about the environment, about war and peace. “They” make the decisions that affect our work life, family life, our love life and our health. “They” make the decisions about life and death. The media drumbeat permeates our consciousness, insisting over and over that “they” are the powerful and we are the powerless; that they are the knowledgeable and that we lack the ability to understand complex international economic and political issues. “They” know what is good for us and we are lucky that “they” are willing to shoulder the burden of managing society.

Today, “they” are powerful. But only because we give them that power. Only because we do not take responsibility for our own lives. A few hundred or a few thousand human beings can rule over billions of people only if those billions permit them to do so. A few energetic individuals today do control the lives of billions because those billions are drifting through life as if in a trance.

Today, a few human beings are gambling with our lives and our health, with the lives of all those we love, with the future of all of the people of planet earth. In arrogant ignorance, motivated in large part by greed, they are tampering with fundamental processes of life. Yet, they do not know what life is. They do not know its ways or how it functions. Although they have no idea as to the outcome of their experiments with the genetics of plants and animals, these reckless individuals are proceeding full speed ahead.

The question “What is Life?” has long motivated many men and women to study, to search for an answer to that eternal question. Even though they did not expect to arrive at a final answer, their journeys along life’s path brought them to marvelous and unexpected places. However, our genetic engineers are not among those seeking deeper insight into life. They seek simply to manipulate the genetic structure of living things for a profit. Today, the question “What is Life?” appears to have been replaced by another question, shallow but sinister—“Who owns Life?”

Without any understanding of what Life is, the contemporary science of genetic engineering has brought us to a crossroads. Individual scientists have been granted patents on life; universities and corporations have been awarded patents giving them ownership of

life as well. Can Life itself be owned, reduced to a commodity? This development is well underway. The patenting of life is not something that will occur in the future—it is already here.

Many of the companies promoting the genetic modification of food call themselves “life sciences” companies. Nothing could be further from the truth. It is not yet widely recognized, but the work of the so-called “life sciences” companies is profoundly life-negative. The love of Life itself, vital to human existence, is missing from human endeavors that seek to control and own Life.

It takes work to gain the knowledge that is needed to know what to do about such matters as the genetic modification of food. This book will provide a great deal of information—including basic facts, the industry’s point of view, and the thoughts of independent scientists and consumer advocates—that will allow you to develop your own informed view about this controversial topic.

Wilhelm Reich offered advice that is relevant in your effort to understand the importance of the genetic modification of foods for you and your family. In his book, *Listen, Little Man!* Reich wrote, “Tell your fellows in work all over the world that you are willing to work for life only, and no longer for death...And most important, THINK CORRECTLY, listen to your inner voice which nudges you gently. You have your life in your own hand.”

What would you like to eat? It’s your choice.

Should Life Be Patented? Ask “Pharm-Woman”

In her book, *Gene Wars: The Politics of Biotechnology*, Kristin Dawkins, a Senior Fellow at the Institute of Agriculture and Trade Policy, writes of the ultimate nightmare of those who fear the excesses of biotechnology—“Pharm-Woman.”

According to Dawkins, Baylor University applied for a patent in Europe to allow it to create a human female who would be genetically altered in such a manner that her breasts would become drug factories. In essence, Baylor scientists wanted to use this GM-woman’s breasts to create pharmaceuticals. And this is called “life sciences.”

“Pharm-woman” is not the only story about scientists moving in truly Frankensteinian directions. In Seattle, a physician took spleen cells from a patient during an operation without his consent and patented them. He later tried to get the patient to sign a consent form after the fact but wound up in court instead.

Such unethical actions are engaged in at the highest levels of government as well. The august National Institutes of Health and the more openly mercenary Department of Commerce of the Federal government have tried to patent the DNA of the indigenous peoples of Papua New Guinea, Panama

and the Solomon Islands. The patent applications, and one patent that was actually granted, were later withdrawn after these actions brought on a firestorm of criticism at home and around the world.

Should humans be cloned? A few patents have been granted which, for all practical purposes, make it legal for corporations to create and own cloned human beings. What is in store for all of us if we take this path? It's probably time to re-read Aldous Huxley's disturbingly prescient novel, *Brave New World*.

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