

Engineering Humans Is Inhuman

By Andrew Kimbrell

JURASSIC PARK is predicted by many to be this summer's blockbuster movie. America appears fascinated with Michael Crichton's tale of scientists genetically engineering dinosaur cells discovered in fossils, and then recreating and cloning these long-extinct species. This is fantasy, but most Americans are unaware of the real-life exploits of current genetic engineers — science facts which in many cases are as chilling as any science fiction.

Over the last decade, U.S. government and private researchers have expended billions of taxpayer dollars in the creation of tens of thousands of genetically engineered animals never before seen. Pigs have been genetically designed to contain human growth genes in the hopes of creating "super pigs" that would have more meat. Carp, catfish and trout have also been engineered with a number of genes from humans, cattle and rats to increase their growth and increase reproduction. Researchers have recently engineered chickens so that they no longer contain the genetic trait for brooding — eliminating their "mother instinct" so that they become more efficient egg producers.

Increasingly, limits seem to be disappearing to what the engineers of life will be able to do. One prominent scientist predicts that we may soon see, "five-ton cows, and pigs 12 feet long and five feet tall." Others have predicted the creation of a wide variety of transgenic creatures from monster chickens to oysters that will survive in polluted waters and wolves that avoid sheep.

Many people are concerned about the creation of novel animals and plants. Of immediate urgency is the threat of "biological pollution." When hun-

drreds, and soon thousands, of novel genetically engineered animals are taken out of the laboratory and introduced into the environment, ecological havoc could result. Scientists compare the risks of releasing genetically engineered organisms into the environment with those encountered in introducing exotic organisms — such as Dutch elm disease and the gypsy moth — into the North American environment. At present, no regulations limit the release of genetically engineered animals.

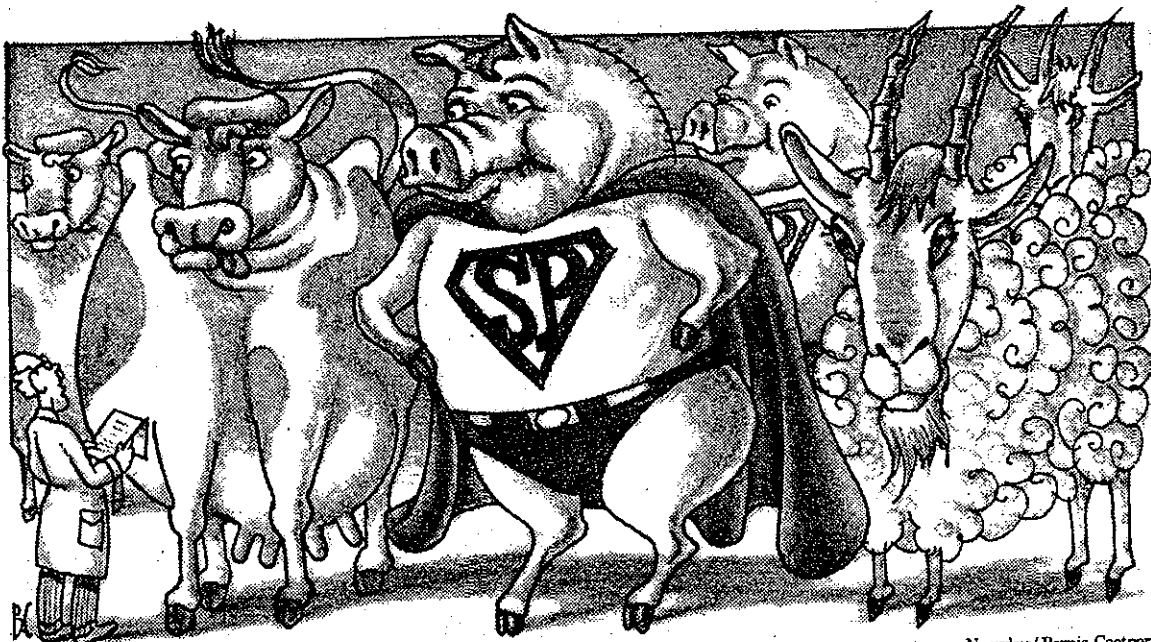
Genetic engineers in the United States and Canada have now cloned higher mammals, including cattle. While glitches have occurred, in one case causing the creation of giant "freak" cows, biotechnologists now feel that they can alter animals to be more efficient sources of food and then clone unlimited copies of the "perfect" lamb, pig or cow.

As researchers genetically engineer and clone plants and animals, will they take the next step: the

engineering and cloning of humans? Many scientists feel that the current ability to clone larger animals makes it likely that the first human will be cloned within the next two decades. One writer notes that "Genetic engineering has the potential to create a vast army of identical clones, each produced to some preset specification. Cannon fodder, scientists, opera singers, all could be manufactured to order if the effort that went into putting men on the moon were directed to this new form of exploration." Human clones could also be used for organs for transplants and for embryos for research.

But does America want cloned "perfect people"? Indications are that it might. Both in this country and abroad sex-selection abortions have surged. In these, couples ascertain the gender of their unborn child and abort if the gender is "wrong." Scientists now tell us that they will soon discover the genes

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Limit Engineering on Humans

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responsible for height, weight, IQ, skin pigmentation, shyness and numerous other nondisease traits. Many couples will almost certainly utilize genetic screening to discover the traits of their unborn children and choose to implant an embryo, or abort a fetus, on these bases. A recent poll revealed that 11 percent of Americans would abort a child genetically predisposed to obesity.

Moreover, congressional studies released last year describe how the government, employers and

insurance companies are already discriminating against individuals with "inferior" genetic readouts. Perhaps equally disturbing, biotechnology companies are making hundreds of millions of dollars each year in the sale of genetically engineered human growth hormone. This is being injected into thousands of children, not because they are sick, but because they are normal but short in a society that favors the tall.

Many in the media support the prospect of a society in which animals and humans are engineered, cloned and sold as any other product. The New York Times has editorialized that "Life is special, and humans even more so, but biological machines are still machines that now can be altered, cloned, and patented. The consequences will be profound, but taken a step at a time, they can be managed." Others disagree. Michael Crichton has stated that "Biotechnology and genetic engineering are very powerful. The film suggests that control of nature is elusive. And just as war is too important to leave to the generals, science is too important to leave to scientists."

Policy makers should take heed. Now is the time to limit genetic engineering to the treatment of serious disease. Congress must act quickly to ensure that life forms are not engineered, cloned and patented. As the technology of genetic engineering accelerates, the nation must make sure that human choices control technology rather than technology controlling human destiny.