The topic of this panel is "Biotechnology: Boon or Bane for Spiritual Development." It has very often been said that we are on the threshold of the biotech century, and I am sure that all of you are very clearly aware that genetic engineering is going to totally reshape life on this planet in many ways: economically, politically, scientifically—particularly in terms of medicine, and also environmentally. Most important for all of us is what the relationship of this incredible technology will be to the spiritual nature of human beings. Although an enormous amount has been written on biotechnology, very little has been written about the relationship between biotechnology, particularly genetic engineering, and the human spirit.

Allow me to mention two ways in which genetic engineering is profoundly affecting all of our lives.

First, at this very moment, the United States government is considering a request for medical scientists to intervene in the germ-line of human genetics, in other words, to change the human genetic structure in a way that would be transmitted to future generations. This means that human evolution in its traditional meaning is coming to an end. We will be taking over responsibility, not only for the evolution of human beings, but also for the evolution of many other forms of life on the planet, both sentient and non-sentient.

The second way in which of genetic engineering is directly touching our lives, that fortunately, insofar as we are aware, is not yet operational, is the use of genetic engineering in biowarfare. As I am speaking, many governments are actively working on the use of genetically engineered organisms in biowarfare, and presumably so too are terrorist organizations. These are two things, which are part of the “promise” of this new biotech century, that we are going to have to be dealing with in the immediate future.

Paradigms are lenses through which we see issues that aid focusing, clarifying, and perhaps also distorting how we look at issues. Professor Ted Peters and Professor Margaret McLean are both going to be talking primarily from Christian
paradigms. Professor Huston Smith has already mentioned Scientism as the dominant paradigm of our culture. That still leaves a whole wide range of important paradigms. As both a Buddhist scholar and practitioner, I would like to briefly introduce some distinctive features of the Buddhist paradigm's relation to genetic engineering.

Four aspects of the Buddhist paradigm are somewhat different than the dominant paradigm of Scientism and many of the paradigms that we find within Christian theology. The first aspect that I’d like to mention is *Ahimsa**, which is particularly appropriate to our gathering here today. *Ahimsa* means non-harming; it is the principle of respect for the intrinsic value of the life of all sentient beings, not just human life. This paradigm respects sentient beings not merely for their usefulness to us as tools or means to ends. Out of this principle of respect for life comes the notion of selfless compassion as a guiding principle in our actions, so that, in terms of genetic engineering, it would exclude any instrumental use of human or non-human sentient life. If I had time, I would go into the horrific instrumental use of non-sentient life, and sometimes unfortunately human and other sentient life, in the pursuit of profit by biotech companies.

The second aspect I’d like to discuss is transcendence. Transcendence refers to the potential of all human beings for developing spiritual wisdom and liberation. Transcendence cannot be couched in scientific terms. Nor is there any way to talk meaningfully about transcendence from the point of view of Scientism.

The third aspect of the Buddhist paradigm is the understanding that the cosmos is an open system. In contradistinction, the scientific method operates within hypothesized artificial and closed systems, that are assumed to have some meaningful, but incomplete and imperfect, correspondence with the "real" world. From the viewpoint of the paradigm of Buddhism, it is clear that scientific methodology cannot, because of its inherent limitations, assess the full extent of the possible effects of genetically engineered alterations on living creatures in a world that is an open system. Thus no certainty or reliable risk assessment is possible using the scientific model.

The fourth and final aspect of this paradigm that I would like to mention is its non-Cartesian nature. In other words, our minds and spirits affect our bodies, our bodies affect our minds and spirit, and body, mind, and spirit are non-dual. Ultimately, they are neither mutually distinct, nor qualitatively different. Because body, mind, and spirit interrelate with one another and affect one another, the karma-based ethics of the Buddhist paradigm stresses the importance of the purification of all three.

I hope that you have been able to follow this explanation,
which has been very brief because of our time constraints, of these four aspects the Buddhist paradigm, which is so different from the mainstream paradigms of the modern world.

Finally, I would like you all to take a moment to reflect upon the possibility, which exists because of the interrelation and ultimate non-duality of body, mind, and spirit, that genetic engineering may adversely influence the potential of sentient beings to achieve transcendence and liberation. Because science deals only with the physical realm, no scientific experiment or methodology can possibly assess this kind of risk. Even if there is only a relatively small possibility of genetic engineering having a serious effect on the nature of the human spirit and its potential for transcendence, I think many of you will agree with me that it is a very serious cause for concern.

*The acronym AHIMSA stands for ‘Agency for Human Interconnectedness through Manifestation of Spiritual Awareness.’
**Ahimsa is also a word in Sanskrit meaning nonviolence.

[Editor's note]: Further information can be found on Prof. Epstein’s websites “Resources for the Study of Buddhism” <http://online.sfsu.edu/~rone/Buddhism/Buddhism.htm> and “Genetic Engineering and Its Dangers” <http://online.sfsu.edu/~rone/gedanger.htm>

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**Continued from back cover**

Dharma Master Heng Tso began by comparing the value of winning a lottery to that of attending a session. He said, “How many people, if they won the lottery, would not collect the money? Well, coming to an Amitabha Session is much more valuable than winning, say, an eighty million dollar lottery, but still, many people don’t attend. They take what is valuable for not being valuable, and what is not valuable for being valuable. The opportunity is here to attend the session, yet a lot of people don’t attend.” Nelson Pizzaro, a young man from Colombia, told about how he read about the teachings of the Buddha in Germany and began to recite the Buddha’s name regularly. He also shared several auspicious dreams that he had during the session.

Sarah Babcock reflected on growing up at the City of Ten Thousand Buddhas. She said that as a young girl, “When reciting Amitabha’s name, my brother and I would imagine that we were sort of making a stairway up to the Land of Ultimate Bliss. Each time you recite ‘Namo Amitofo,’ one more stair would appear, and you would get that much closer to the Land of Ultimate Bliss. And my life has sort of been like those stairs, but Amitabha and Guanyin, I believe, have helped me up them, one step at a time.”

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**接封背**

恒佐法師首先說，世上沒有人會中了彩票而不去領錢的。來參加念佛比了八十萬的彩票還有價值，但仍有許多人不參加。世人拿有價值的當沒價值，沒價值的當有價值；有機會，而仍多數人不來。來自南美洲哥倫比亞的畢薩羅陳述了自己如何在德國時閱讀了佛教教義，又如何開始經常唸佛名號，也提及了好幾個吉祥的好夢。

聖城長住家莎拉·白考克回想自己在聖城成長的過程時說，她小時「每當唸阿彌陀佛名號時，我跟哥哥倆就想像我們在這一座通往極樂世界的梯子。我們每唸一聲佛名，就有一級新的階梯出現，我們也就更靠近極樂世界一梯級。我自己的生命也就像那階梯一樣，我信願溫菩薩和阿彌陀佛一直都在幫助我，一級一級地往上走。」

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