Cloning: New Age of Biological Advancements

"God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them." —Genesis 1:26,27

THE MOST MOMENTOUS event in the recorded history of mankind centers around the simplistic scriptural account of the creation of Adam and Eve in the Garden of Eden. We learn firsthand that our first parents were created in the very image of the great God of the universe, and that the reference to 'us' points to the fact that the *Logos* was also on hand to share in the wondrous plans of his Heavenly Father on that most blessed occasion. "The same was in the beginning with God. All things were made

by him; and without him was not any thing made that was made."—John 1:2,3

The original Old Testament Hebrew from which our English word 'image' has been translated points to Adam's likeness and resemblance to God. Its literal meaning is 'to shadow forth.' The same word is also used in connection with the birth of Adam's son, Seth. "Adam lived an hundred and thirty years, and begat a son in his own likeness, after his image; and called his name Seth."—Gen. 5:3

ADAM'S COVENANT WITH GOD

God's law was written in Adam's heart, thereby establishing a covenant relationship between the Heavenly Father and his earthly child. Adam was perfect mentally and morally as a human being, and was provided with similar powers of reasoning, as well as judgment, will, and memory. As a perfect man, he also possessed the moral faculties of justice, love, and benevolence. He was thus endowed with fleshly qualities that placed him in a suitable position to have dominion over the whole lower earthly creation.

COVENANT RELATIONSHIP BROKEN

Man's part of the obligation and covenant relationship with God was to obey his Creator's will. This was the least thing that could be expected from him to show forth his love and appreciation for his very existence, and the manifold blessings of life which had been so lovingly bestowed upon him. God's part of the covenant was his continuing promise to extend man's life, but, when our first parents violated his laws, that blessed relationship was broken. God was not bound to continue Adam's

life after that relationship had been severed. "Like Adam they have transgressed the covenant." (Hos. 6:7, *New American Standard Version*) As sin, violence, and corruption rapidly increased, man's life spiraled downward as he began to experience alienation from his loving Creator.

GIANTS IN THE EARTH

"It came to pass, when men began to multiply on the face of the earth, and daughters were born unto them, That the sons of God saw the daughters of men that they were fair; and they took them wives of all which they chose. And the LORD said, My spirit shall not always strive with man, for that he also is flesh: yet his days shall be an hundred and twenty years. There were giants in the earth in those days; and also after that, when the sons of God came in unto the daughters of men, and they bare children to them, the same became mighty men which were of old, men of renown."—Gen. 6:1-4

Some of these materialized angels, spiritual sons of God, were given the privilege to supervise mankind prior to the flood with the opportunity to assist and encourage fallen mankind in his present state of condemnation. Satan perhaps saw an opportunity to circumvent God's righteous judgments and produce a new race of men of great physical vitality and mental powers. These angels became the fathers of a new and distinct race, 'men of renown.'

The children of this unauthorized relationship between angelic beings and the daughters of men, had been grafted upon the condemned offspring of Adam. They were therefore a hybrid race of men. This was in total violation of the Divine will, and

they were thereafter restrained from ever assuming physical bodies again, and were isolated from God's other holy angels. Their illicit progeny were destroyed in the flood of Noah's day.

NEW RESEARCH TO IMPROVE LIFE

In recent years, scientists in various parts of the world have been involved in research that has the potential to alter human health, life, and life spans. New advancements in biological studies are now underway, and are contributing to further development through the use of modern technology that has even newer, and more unlimited, potential. During the last decade alone, researchers who were looking for improved methods to treat illness and injury in humans, unexpectedly stumbled upon startling techniques that can enhance the quality of life in certain animal species which have been under study. They are now finding advanced and improved ways to make these animals stronger, faster, smarter, and having longer life spans.

Scientists are now on the verge of applying this newfound knowledge to men and women. Researchers, who were looking for ways to cure Alzheimer's disease, in 1999 genetically engineered a strain of mice that can learn things five times more quickly than can normal mice. This same research that could cure Alzheimer's is also leading to the use of drugs and genetic techniques that have the potential to increase human intelligence. Further to this are recent methods being developed that will prevent heart disease and cancer, but also with the greater potential to halt, or even reverse, the aging process in human beings.

MORE THAN HUMAN

Ramez Naam is the author of a recent book entitled *More Than Human*, with the subtitle "Embracing the Promise of Biological Enhancement." A *Los Angeles Times* review of his book says that his study is "A terrific survey of current work and future possibilities in gene therapy, neurotechnology, and other fields." As recently as 1990, an American researcher discovered that by changing a single gene it is possible to double the life of a tiny nematode worm. The review of *More Than Human* continues by pointing out that Naam's study "is about our growing power to alter minds, bodies, and life-spans through technology—a power we can choose to fear, or to embrace." The questions being asked, therefore, are "How will these technologies affect society? What will they do to the economy, to politics, and to human identity? What social policies should we enact to regulate, restrict, or encourage the use of these technologies?" The future is uncertain as to how these questions will be addressed.

"The most widely feared and denounced genetic technology is reproductive cloning—the production of a human baby with genes copied from another person. Researchers have cloned sheep, cows, and monkeys, and dubious claims have been made that humans have been cloned. Whether that has happened yet or not, the fundamental technology exists, and the claims have aroused public fears. Human cloning has been almost uniformly denounced as morally repugnant. Leon Kass, chairman of the President's Council on Bioethics (PCBE), describes

human cloning as a 'threat to the dignity of human procreation and a first step toward a eugenic world in which children become objects of manipulation and products of will.' Virtually every political leader in every country is publically opposed to cloned babies."

U.N. ADDRESSES CLONING ISSUE

The *U.N. News Centre* addressed the growing and widespread concerns about cloning in its report (March 25, 2005) under the heading: "General Assembly Approves Declaration Banning all Forms of Cloning." The report said: "The United Nations General Assembly today (March 8, 2005) approved a non-binding declaration calling on all U.N. member States to ban all forms of human cloning, including cloning for medical treatment, as incompatible with human dignity and the protection of human life. By a vote of 84 in favor, 34 against, and 37 abstaining, with 36 absent, the Assembly acted on the recommendation of its Legal, or Sixth Committee to adopt the text, called *The United Nations Declaration on Human Cloning*. But some delegates said they opposed banning therapeutic cloning. The Declaration, negotiated by a Working Group last month, also banned genetic engineering techniques that may be contrary to human dignity. It called on States to prevent the exploitation of women in the application of life sciences and to protect adequately human life in the application of life sciences. Those who voted for the Declaration welcomed it as a clear expression of the ethical norms that should guide scientific research."

U.N. DIVIDED ON CLONING ISSUE

United Nations diplomats failed to reach agreement on a nonbinding declaration that would encourage governments to adopt laws on human cloning. It was hoped that those on both sides of the issue could find an acceptable approach to stem-cell research. The lack of consensus within the United Nations General Assembly's legal committee emphasizes the difficulty in adopting the panel's recommendations. Advocates of stem-cell studies were anxiously waiting for the General Assembly's decision on the matter.

POSITIONS OF MEMBER STATES

The United States voted for the Declaration and said it supported a total ban on human cloning. Their position, however, does not prohibit the development of cell and tissue therapies that involve cloning technology to produce DNA molecules, organs, plants, tissues, or cells and animals other than human embryos. They believe that other nations should also actively pursue potential medical and scientific benefits which have enabled researchers to develop innovative treatment for disease.

The South Africa delegation, which abstained from voting, said it believed that therapeutic cloning should be directed at protecting human life, and that it would continue to support these methods. Great Britain voted against the Declaration by saying that the General Assembly had missed an opportunity to prohibit reproductive cloning because of the unwillingness on the part of some States to compromise, and to permit controlled applications of therapeutic cloning. China voted against the

Declaration and said the prohibitions in the text could be misunderstood as covering all forms of cloning. Russia, France, and India regretted that there had been no consensus on banning reproductive cloning, but wanted to keep their options open on the whole question of therapeutic cloning.

THE HARVARD DEBATE

Gareth Cook, in a news item "Harvard Provost OK's Procedure," which appeared in the *Boston Globe* (March 20, 2005), said: "A top Harvard University official has approved the cloning of human cells to make embryonic stem cells, bringing scientists here closer to launching an audacious—and controversial—effort to battle juvenile diabetes, Parkinson's disease, and other maladies in powerful new ways.

"The Harvard project, which Governor Mitt Romney and others have attacked on ethical grounds, cannot proceed until a university committee finalizes a protocol for protecting the volunteers who will provide the cells. But Dr. Steven E. Hyman, Harvard provost, said that after more than a year of review, the university has concluded that the work is ethically sound and scientifically important. This research holds the promise of important benefits for the understanding and treatment of serious human diseases. Hyman said he wanted to see the science progress within acceptable ethical boundaries.

"The project comes at a crucial time, when the Massachusetts government is considering new stem-cell legislation and some, including Romney, are seeking to outlaw the very research Harvard

plans to do. If Romney fails and the Harvard team, led by Kevin Eggan and Douglas Melton, begins the experiments, it will be the only active group at an American university, and one of only a handful in the world. The approval, which was quietly given in January, also puts the Harvard name solidly behind the cloning of human cells, which will probably encourage other U. S. scientists to follow their lead, and sharpen the national debate."

REGENERATIVE MEDICINES

An enlightening article, "A Bright Hope to be Realized" was written by Mortimer Zuckerman, and appeared in *U.S. News & World Report* (January 3, 2005). He said: "Something like a hundred million Americans suffering from disease and the incubus of age hold out hope that relief may come one day from regenerative medicine, meaning that science may be able to reprogram the human body so that it can heal itself and impede many of the symptoms of senescence. The promise lies in the so-called stem cells.

"Three years ago, President Bush announced that only pre-2001 embryonic stem-cell lines could be used in federally funded research. There were enough of these lines, more than 60, the President said, for adequate research purposes. The plan, as many had suspected at the time, has not worked.

"Some 70 percent of all Americans supported stem-cell research. California voters just approved a $3 billion, 10-year research program. Other states are likely to follow. But this isn't the best solution. States simply cannot muster and focus the resources to repeat the great successes of American science

and medicine. Reliance on sporadic state-by-state initiatives in stem-cell research simply will not guarantee that the best proposals will be identified and funded.

"A national stem-cell program could organize teams to tackle complex problems and avoid duplication; evaluate diseases most susceptible to attack; ensure that research findings are transparent; establish ethical guidelines for the use of human tissues in research; and, finally, decide at what point treatments could progress to human trials.

"The real question, then, is how to amend the Bush policy in a way that might be acceptable to all. Some 58 senators now seek a change in the Bush policy, including 14 Republicans. 'There is no greater way to promote life,' says Utah's Orrin Hatch, 'than to find a way to defeat death, and stem-cell research may provide a way to do that.'"

JESUS' BLOOD NECESSARY

Fallen man's most aggressive attempts to promote life, and to defeat death, by stem-cell research, or any other effort, will never restore the human race to the perfect life Adam had in the Garden of Eden. Because of his sin and disobedience to Divine law, Adam was sentenced to death. Man is unable to help himself from the ravages of sin, sickness, and disease that will end in the grave. They needed a savior, and God provided his own Son, who willingly left his spirit nature to become a perfect man to die for the sins of Adam, thus fulfilling this feature of God's plan of reconciliation for the sins of the world.

SPRINGS OF LIVING WATER

Jesus used the powerful symbol of water to illustrate his future program that would provide everlasting life for the whole human race. "Whosoever drinketh of the water that I shall give him shall never thirst; but the water that I shall give him shall be in him a well of water springing up into everlasting life."—John. 4:14

Job pointed down the stream of time to indicate that a provision for deliverance from death would be made possible through a ransom price. It would ultimately result in man's coming back from the condition of death and to one in which he would return to the days of his youth. "Then he is gracious unto him, and saith, Deliver him from going down to the pit: I have found a ransom [*Marginal Translation*, an atonement]. His flesh shall be fresher than a child's: he shall return to the days of his youth."—Job 33:24,25

Isaiah provides us with a prophetic sketch of this inspiring scene, and the marvelous effects that this provision from the death sentence will have for the world. The times of restitution will make these blessings available during Christ's thousand-year kingdom. "The eyes of the blind shall be opened, and the ears of the deaf shall be unstopped. Then shall the lame man leap as an hart, and the tongue of the dumb sing: for in the wilderness shall waters break out, and streams in the desert. And the parched ground shall become a pool, and the thirsty land springs of water."—Isa. 35:5-7

THE DEAD ARISE

One of the grandest features of the kingdom of Christ will be the foretold resurrection of all the

dead who have ever lived. Jesus explained this particular role of his kingdom reign when he said, "Wonder not at this; Because an hour comes in which all those in the tombs will hear his voice, and will come forth; those having done good things, to a resurrection of life; and those having done evil things, to a resurrection of judgment."—John 5:28,29, *Wilson's Emphatic Diaglott*

CONCLUDING REMARKS

Medical science has made tremendous achievements toward the treatment of disease and the alleviation of suffering among mankind. They are to be commended for their untiring work. Many have devoted their lives toward research endeavors and have spent years in following through on difficult projects. Some have become discouraged at the amount of time necessary to realize significant results.

Students of the Bible continue to pray for the soon establishment of Christ's kingdom as the only true and long-lasting answer for the sin-sick and dying human family. Let us continue to look forward to that time when all the families of the earth will be blessed by our Lord Jesus and his administration of righteousness over the world. ■