

Vatican greets development of first synthetic cell with caution

VATICAN CITY - The successful development of a synthetic cell can have many practical applications, but the technology must be regulated, said the Vatican newspaper, L'Osservatore Romano.

A team of geneticists in the United States announced May 20 that it had created a living artificial cell.

After mapping on a computer the complete DNA code of a bacterium, the team led by J. Craig Venter, inserted the synthesized DNA into a bacteria cell, which was then able to replicate and be controlled by the synthetic genome.

Synthetic cells could be used to convert carbon dioxide into fuel or to create new vaccines for treating diseases, Venter told CNN May 22.

The Vatican newspaper emphasized that scientists had not created life, but had "substituted one of its engines."

Venter's creation has produced "an interesting result," which could have many applications, but the new technology "must have rules just like everything that lies at the heart of life," it said in an article May 23.

"Genetic engineering can be used for good," particularly in treating genetic diseases, it said, however, caution must be exercised as "many people in fact are concerned about the possible future developments of genetically modified organisms."

Archbishop Rino Fisichella, the head of the Pontifical Academy for Life, told Italian television May 21 that as long as synthetic cells were used "toward the good, to treat pathologies, we can only be positive" about their development.

However, if they are used in ways that offend human dignity, "then our judgment would change," he said.

"We look at science with great interest. But we think above all about the meaning that must be given to life," the archbishop said. "We can only reach the conclusion that we need God, the origin of life," he added.

Cardinal Angelo Bagnasco, president of the Italian bishops' conference, told Italian news agencies that the development of the first synthetic cell was a "further sign of human intelligence, which is a great gift of God."

However, with intelligence comes responsibility, he said. Therefore, any intellectual or scientific advancement "must always measure up to an ethical standard."

Bishop Domenico Mogavero of Mazara del Vallo, chairman of the Italian bishops' legal affairs committee, said that the new form of life "is a potential time bomb, a dangerous double-edged sword for which it is impossible to imagine the consequences."

Human beings must never pretend to be God by artificially creating life, because life can only come from God, Bishop Mogavero told the Italian newspaper La Stampa.

"Pretending to be God and parroting his power of creation is an enormous risk that can plunge men into barbarity," he said.