Report: Scientists Create New Life Form in Lab

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A scientist who built a synthetic chromosome from laboratory chemicals is expected to announce the creation of a new species, the first new artificial life form on Earth, British newspaper The Guardian reported Sunday.

The new species is a form of bacteria, and the announcement, which could come as early as Monday, is expected to provoke a substantial ethical debate about the manufacturing of life forms in a test tube, as well the dangers posed by introducing a new species, The Guardian reported.

Click here to read the full report in The Guardian.

Craig Venter, the genetics specialist who spearheaded the landmark breakthrough and heads the J. Craig Venter Institute in Rockville, Md., where the research was conducted, said the new species could lead to new energy sources and new methods for combatting global warming.

"We are going from reading our genetic code to the ability to write it," Venter told The Guardian. "That gives us the hypothetical ability to do things never contemplated before," he said.

For example, the bacteria could be capable of absorbing carbon monoxide, a possible solution to global warming, Venter said.

According to The Guardian, a team of 20 elite scientists assembled by Venter at his institute has already constructed a synthetic chromosome from lab chemicals—also a landmark achievement. The man-made chromosome will be transplanted into an existing bacterial cell and is expected to take control of the cell. When the synthetic DNA takes over, the cell will be a new species.

While critics acknowledge that artificially manufactured life forms could lead to such positive developments as new drugs or treatments for disease, the potential dangers could be equally unlimited.

"It could be a contribution to humanity such as new drugs or a huge threat to humanity such as bio-weapons," Pat Mooney, director of ETC Group, a Canadian bioethics organization, told The Guardian.

Venter has provoked additional controversy by applying for a patent for the synthetic bacterium, The Guardian reported.