# CHINESE RESEARCHERS DEVELOP 'ROBOT NANNY' TO CARE FOR EMBRYOS IN ARTIFICIAL WOMB

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Chinese scientists have developed a robotic 'nanny' to care for an artificial womb. They assert that this robotic method will be more efficient than natural pregnancy, and sociologists hope that it will also solve the problem of plummeting birth rates in China.

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Earlier this year in the *Journal of Biomedical Engineering*, Chinese scientists of the Suzhou Institute of Biomedical Engineering and Technology published the results of research into a technology that will make it possible to <u>grow fetuses inside an artificial womb</u> under the supervision of a robotic monitoring system. While previous research has only been done on animals, the researchers hope these results will make it possible to carry human fetuses to term without pregnancy. Obvious ethical hurdles stand in the way of this goal, but the report indicates that we are closer to this bioethical event horizon than we may have thought.

According to the <u>research</u>, the nanny robot serves "to optimize and improve the system for *in-vitro* embryo culture," so that with the help of a planned "online monitoring system" the "long-term culture of embryos" can be tracked. The study claims that robotics allow embryos to be cared for more effectively than a natural womb could. The "long-term embryo culture device," as it is called, consists of a system of fluid containers in which the embryo develops, aided by fluid controllers and supplemented by oxygen. Above it all is an optical device capable of magnification to observe the embryos, intricate monitoring, and passing the key growth information on to the robotic nanny. To top it off, the AI can even rank the embryos on overall health and potential.

The scientists <u>expressed</u> hope that this technology could help understand human

embryonic development and thus help solve congenital disabilities and other significant reproductive health problems.

Artificial human breeding is seen as a path to optimize human genetic material, but also as a potential answer to the drastic decline in birth rates in China. According to <u>Nathan</u> <u>Minsberg</u> of *i24NEWS*, China is facing "the lowest birth rates in a decade." As Chinese women increasingly reject "traditional priorities" such as marriage and motherhood, "the number of newborns has nearly halved in the last five years."

International law has so far banned experimental studies on human embryos more than two weeks old, but Minsberg says China hopes that could soon change.