

## We Should Be Concerned about Chimeras

Chimeras are hybrid creatures that result when the DNA from two or more individuals or species are mixed. The word chimera comes from ancient Greek mythology. The Chimera was a monster with the body of a lion, the head of a goat protruding from its back, and a tail ending with the head of a snake.

A major concern in bioethics is the creation of chimeras that mix animal elements with human embryos. It is clearly unethical to inject animal DNA into humans in the hope of making a new being that is neither fully human or animal. The National Catholic Bioethics Center (NCBC) was a cosignatory of a [letter](#) with the Catholic Medical Association and other groups warning the National Institutes of Health (NIH) about the dangers of human–animal chimera research in 2016.

Some chimeras come about naturally. A very interesting instance is the documented case of [mothers](#) who retain cells in different parts of their bodies from the children they carried in their wombs. This is hypothesized to provide health benefits to the women. Those who have received bone marrow transplants start producing blood with the DNA of the donor. These are examples of ethically unproblematic chimeras.

The primary concern about human–animal chimera research centers on the danger of creating an entity that incorporates “major pillars of human identity,” such as the brain or reproductive organs. The [Church](#) has already taught that one cannot morally justify the transplantation of human gonads or brains from or to other human beings or animals. Any attempt to do this would be a grave attack on the dignity of the human person. It follows that any scientific experiment that had the potential to generate a human brain or gonads in a hybrid creature would also be gravely unethical.

In the realm of science fiction there are frightening depictions of societies divided into the genetically-enhanced masters and the debased or even subhuman slave classes. One of the terrible things about science fiction is that it sometimes becomes reality. We must be vigilant, raise red flags, and place strong prohibitions on experimentation and research programs that are clearly unethical. [Chinese scientists](#) apparently create human–animal chimeras that they kill after study in the laboratory.

Excluding all research on human embryos, I must also point out that, with stringent safeguards in place, some chimera research could be ethically justified. As mentioned, a chimera is simply the blending of the cells of two or more individuals in a single organism. If it were possible to grow, say, a human kidney in an animal starting from human cells obtained in an ethical way, that could potentially be acceptable if done with the goal of saving human lives. The Church would not be opposed to such research in principle if both the end sought and the means used were moral. It remains true, however, that every precaution would have to be taken to prevent

the slightest possibility of the creation of either a severely handicapped human being or a “humanized” animal.

It was disappointing to see that, when Republican Senators recently tried to pass an amendment banning human–animal chimera research in a funding bill for a huge new science and technology initiative, it was defeated by the Democrats on a [party-line vote](#). Apparently, there is great reticence and suspicion toward the protection of human embryos within the Democratic leadership. It would truly be tragic if extreme pro-abortion views were to lead to the total rejection of the scientific fact that human life begins at conception. Human embryos are our youngest and most fragile brothers and sisters. They need and deserve our respect and care.

The great evil of conceiving human embryos in laboratories has led to the appalling possibility of using these tiny humans for unethical chimera experiments. This is one more example of the marked tendency of evil to grow. We know, for example, that if a person begins to lie, he often must add further lies to cover the first one and may even be led to more wrong actions to keep the deceit hidden. The only way out of this vicious downward spiral is to make a clean break or to stop before one begins.

The heartfelt cry of Saint Pope John Paul II that we stop conceiving children in laboratories through *in vitro* fertilization must be heeded. If the law prevented procreation by third parties, an incredible host of evils would be avoided. This is a pressing pro-life concern because human beings who begin their lives through IVF are only growing in number. The problem is spreading worldwide. I recently saw advertisements for IVF in Africa. A doctor in Croatia told me that more children died in his country through IVF failures than from surgical abortion.

A majority of people recoil at the thought of adding animal DNA to human beings to make chimeras. It is important to act while this moral clarity holds firm. Too many scientists are guided solely by the effort to find out what is scientifically possible rather than what is ethically responsible. They need binding guidelines and laws to govern their research.