Human-pig ‘chimera’: Ethics and medical promise of growing human organs in animals

Pig embryos that had been injected with human stem cells when they were only a few days old began to grow organs containing human cells, an advance that promises — or threatens — to bring closer the routine production of creatures that are part human and part something else.

These human-pig “chimeras” were not allowed to develop past the fetal stage, but the experiment suggests such creations could eventually be used to grow fully human organs for transplant, easing the fatal shortage of organs: 120,000 people in the United States are waiting for lifesaving transplants, but every day two dozen die before they get them.

The creation of “intermediate forms” of life is thought by some critics to “denigrate human dignity and blur the line between what is human and what is not, especially if you believe that we were created in the image of God,” said bioethicist and legal scholar Hank Greely of Stanford.

If the marriage of stem cells and CRISPR follows a path [similar to Dolly the sheep], it might not be long before pigs have enough Homo sapiens in them not only to grow human hearts, lungs, livers, and kidneys for transplant but also to model human diseases more closely than current lab animals do and to test experimental drugs.

[The study can be found here.]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: First human-pig chimeras created, sparking hopes for transplantable organs — and debate