Transplant breakthrough? Organs of one species grown inside an animal of another

It's possible to grow organs of one species inside an animal of another species and then transplant that organ to cure disease...In this case, mouse pancreas cells were grown in rats, then transplanted into mice to reverse diabetes. The new research opens the possibility of one day creating human organs inside animals like pigs or sheep that could then be transplanted back into needy patients.

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[Surprisingly,] the transplanted cells reversed the mice's diabetes and kept sugar levels down for one year. The mice didn't reject the cells, even if they were given anti-rejection medication for only five days after the transplant.

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"There are not that many ways to generate a functional adult human organ for transplantation that can save many people's lives," says Qiao Zhou, an associate professor of stem cell and regenerative biology at the Harvard Stem Cell Institute. "This is one I think actually I can see work in the future."

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And then there are the ethical issues...[I]f human stem cells are injected into animal embryos, some of these cells will also go into organs like the brain. What are the ethical implications of having pigs with part human brains?

[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: Mice cured of diabetes by cells grown inside rats — are humans next?