

Growing human organs in sheep could help solve transplant shortage

Growing human organs inside other animals has taken another step away from science-fiction, with researchers announcing they have grown sheep embryos containing human cells.

Scientists say growing human organs inside animals could not only increase supply, but also offer the possibility of genetically tailoring the organs to be compatible with the immune system of the patient receiving them, by using the patient's own cells in the procedure, removing the possibility of rejection.

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[Researcher Pablo] Ross and colleagues have recently reported [a major breakthrough](#) for our own species, revealing they were able to introduce human stem cells into early pig embryos.

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[T]he team have announced that they have managed a similar feat with sheep embryos, achieving an even higher ratio of human to animal cells. "About one in 10,000 cells in these sheep embryos are human," said Ross.

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[T]here are several advantages to using sheep embryos, including that they can easily be produced by IVF, and that fewer embryos need to be transplanted into an adult, meaning fewer embryos are needed for an experiment.

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Sheep also have certain organs – such as the heart and lungs – that are similar to ours.

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Research with pigs is continuing, said Ross, noting that they have other benefits including speed of growth and the ability to produce more young at one time than sheep, meaning fewer animals are needed to produce more data.

Screen Shot at AM

Read full, original post: [Breakthrough as scientists grow sheep embryos containing human cells](#)