

Why studying human chimeras offers best hope for finding Parkinson's cure

Spectrum: Why do researchers want to study mouse-human chimeras?

Rudolf Jaenisch: Traditionally, researchers have studied human conditions by mutating the responsible genes in mice...One alternative approach is to transplant [human stem cells] into mice...[which allows] researchers to track these cells across the lifespan of the mouse. This has the greatest potential for modeling human conditions in animals.

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S: What could you do with these chimeras?

RJ: We can use them study diseases of neural crest derivatives, such as skin cancer...We are also working on introducing human stem cells that could become neurons into mouse brains. We could potentially engineer mice that carry some neurons derived from a person with Alzheimer's disease, Parkinson's disease or autism.

S: How do you view the ethical concerns about chimeras?

RJ: The question was raised: "Would human cells in the mouse brain affect the 'personality' of the mouse? Would the mouse become 'humanized?'" I don't think that's a problem. We expect that only a small fraction of cells would be human in such an animal...It's not a human — there's no way.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Questions for Rudolf Jaenisch: Creating mouse-human hybrids](#)