

Should organs grown from stem cells replace lab animals in research?

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From [mini brains](#) to [mini kidneys](#), an increasing number of organ models can now be grown in vitro [from adult or embryonic stem cells]. Some of these “organoids” can even perform certain functions of the human body[,]...reducing the need for animal models.

“I believe that [organoid models] will replace a lot of current animal experimentation,” [said] [Hans Clevers](#) [,] [one of the field’s pioneers](#)[.]

One area where organoids are well suited to reduce the use of animal models is toxicology...Another advantage...is that they can be used for personalized medicine.

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[However,] [o]rganoids come with their own set of ethical considerations. Bioethicist [Arthur Caplan](#)...said he worries that researchers will rush to use organoids in lieu of animal models before the former have been properly validated. “My concern is, out of a desire to reduce animal use, to save money, and to avoid experimentation in humans, we rush into a new world of organoids and don’t do the proper calibrations,” he [said]. “I’m not against [these models], but we have to proceed with extreme caution.”

Read full, original post: [Will Organs-in-a-Dish Ever Replace Animal Models?](#)