No egg? No sperm? No problem. First artificial embryo made from stem cells

Using stem cells in grown-on 3D scaffolding in a laboratory petri dish, scientists have for the first time created an embryo made entirely from stem cells.

The artificial mouse embryo...is a major step toward creating synthetic embryos that closely resemble natural ones. It could shed light on early development and help improve fertility treatment procedures.

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[W]ithout using an egg in some way, scientists have had difficulty getting cells to communicate with each other early in development...The Cambridge team got around this issue by taking embryonic stem cells (cells found in embryos that can mature into any type of body tissue) and growing them alongside trophoblast stem cells (the cells that produce the placenta).

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The goal is not necessarily to create a real mouse from these cells—and the science is still a ways from that anyway...But being able to study the way the cells develop in the very early days of an embryo's life could shed important light into early development. The Cambridge researchers, for example, engineered different cell types to glow different colors so that they might track how they behave as the embryo develops.

[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: <u>Scientists Have Created the First Artificial Embryo Without Using an Egg or Sperm</u>