

## Twitter Thread by ■■■■■ World Hypothesis



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@nixonist



**Yearly cursed/nightmarish science articles thread. Will include articles from past years for completeness since old threads have been lost.**



(04/25/2017) An artificial womb successfully grew baby sheep — and humans could be next

<https://t.co/Vk1Ot8hK0l>

(05/17/2017) Exposure to BPA potentially induces permanent reprogramming of painted turtles' brains

<https://t.co/8N3wWkRtSI>

(07/23/2017) A Spanish scientist is making robots that he thinks could end sex between humans

<https://t.co/80CwxRsINP>

(03/08/2018) It's Time to Make Human-Chimp Hybrids.

The humanzee is both scientifically possible and morally defensible.

<https://t.co/R925n7ieWz>



BIOLOGY | GENETICS

# It's Time to Make Human-Chimp Hybrids

*The humanzee is both scientifically possible and morally defensible.*

BY DAVID P. BARASH  
MARCH 8, 2018

(03/16/2018) Artificial wombs intended to save premature babies — for now. Next step could be 'immaculate gestation'  
<https://t.co/TqLAZ4rYqr>

# Artificial wombs intended to save premature babies — for now. Next step could be 'immaculate gestation'

*For some, the prospect of artificial wombs raises concerns about uncoupling reproduction from human bodies. For others, it would be the ultimate gender equalizer*



SHARON KIRKEY

March 16, 2018  
12:27 PM EDT

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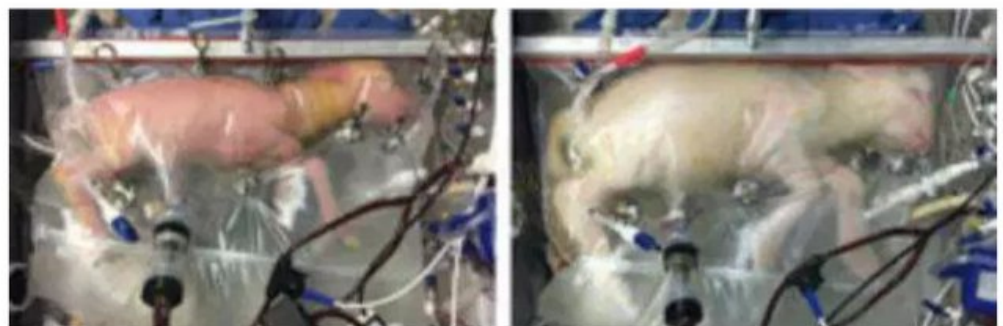
When images emerged last year of fetal lambs growing inside “Biobags” — giant, translucent, polyethylene sacks filled with synthetic amniotic fluid — Anna Smajdor’s visceral and immediate reaction was horror.

Surgically removed from their mother’s wombs at 105 to 115 days, the lambs spent a month swaddled inside what looked a lot like freezer bags, their blood flowing from their umbilical cords to an outside “oxygenator” as they breathed, swallowed and grew from pink, hairless creatures to white, woolly wonders.

“There was one where the lamb seemed to be spasming in the Biobag,” she says.

But what horrified Smajdor, a philosophy professor and ethicist at the University of Oslo, was the use of animals for that lab test — not the idea of “ectogenesis,” or gestation outside the body.

In fact, she says it should be an option to address the “injustice” that the female uterus is still a necessary part of reproduction.



Left: A lamb at 107 days of gestation and on day four of support. Right: The same lamb on day 28 of support, illustrating growth and maturation. *Nature*



Assuming that we're unable to wean ourselves off plastics and other marvels of modern science, we may be stuck innovating our way out of this mess. How long we're able to outrun the drop in sperm count may depend, finally, on how good we get at IVF and other fertility treatments. When I spoke with Marc Goldstein, a urologist and surgeon at Weill Cornell medical center in New York City, he said that while there was "no question I've seen a big increase in men with male-factor infertility," he wasn't worried for the future of the species. Assisted reproduction would keep the babies coming, no matter how sickly men's sperm become.

It's true that fertility treatments have already given men with extremely low sperm counts the chance to be fathers. Indeed, by looking at their cases, we can glimpse what our low-sperm-count future might look like. We know that it will be arduous to conceive, and expensive—so expensive that having children may no longer be an option available to all couples. A fertility-treatment-dependent future is also unlikely to produce a birth rate anywhere near current levels.

Not long ago, I spoke with Chris Wohl, a research materials/surface engineer at the NASA Langley Research Center in Virginia, who spent six years trying to conceive a child. Both he and his wife had fertility problems: Wohl's sperm count was under 2 million per milliliter—the average count we'd expect to reach, at the current rate, by 2034. "We started in the normal way of trying to have kids," he said, "and after a few years, we said, 'Okay, let's talk to some folks.' " They went through several rounds of intrauterine insemination. "And then after that sixth time, we said, 'This isn't working. We need to kind of up our technology game.' So we went to a reproductive endocrinologist and went through several rounds of IVF. And then when that failed, we were going to look into adoption. That's when somebody came forward and said that they would be a surrogate for us." Finally, with the surrogate, the process worked. He and his wife now have a healthy, strong-willed 4-year-old girl.

So perhaps that's the solution: As long as we hover somewhere above Sperm Count Zero, and with an assist from modern medicine, we have a shot. Men will continue to be essential to the survival of the species. The problem with innovation, though, is that it never stops. A new technology known as IVG—in vitro gametogenesis—is showing early promise at turning embryonic stem cells into sperm. In 2016, Japanese scientists created baby mice by fertilizing normal mouse eggs with sperm created via IVG. The stem cells in question were taken from female mice. There was no need for any males.

(10/12/2018) Chinese scientists have created healthy baby mice with two mothers and no father, pushing back the barriers to same-sex reproduction in humans

<https://t.co/5JQuThCDob>

(11/01/2018) Male Breastfeeding Kit Could Let Dads Nurse Their Babies

NEWS

# Male Breastfeeding Kit Could Let Dads Nurse Their Babies

*Got milk?*

By Amanda Tarlton Nov 01 2018, 3:38 PM

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Marie-Claire Springham

(11/25/2018) On the eve of a major summit to discuss ethics of gene edited babies....looks like it already happened in China

<https://t.co/Gj8fT33JSU>

(11/30/2018) The First Clinical Trial of a Male Birth Control Gel Is Under Way

<https://t.co/GyhuolrIWG>

(12/06/2018) This womb transplant breakthrough could open up pregnancy to all sexes

<https://t.co/3xRJBjZg9t>

(01/30/2019) The Death of a Dreamer

<https://t.co/5VUT5IZF92>

(02/08/2019) Transgender women 'should be entitled to womb transplants' so they can have a baby

<https://t.co/dNX4mbTifk>

(03/26/2019) Male pill - why are we still waiting?

<https://t.co/YLW5Vv5wl0>

(04/04/2019) The engineering of living organisms could soon start changing everything

<https://t.co/Tbta3PBNag>

(04/10/2019) UC Berkeley researchers develop hormone-free birth control pills for both men and women

<https://t.co/umWSLnfekV>

(04/11/2019) Chinese scientists put human brain genes into monkeys

<https://t.co/99poklXBdP>

(04/16/2019) First U.S. Patients Treated With CRISPR As Human Gene-Editing Trials Get Underway

<https://t.co/UDzTzCVHDb>

(04/19/2019) The Helmet That 'Resets' Your Brain - Magnetic stimulation is helping some people with depression

<https://t.co/rAWZivAXdP>

(05/14/2019) Human babies born using an artificial womb 'possible in a decade'

<https://t.co/UWyG3BLkL6>

(06/10/2019) Upgrade Your Memory With a Surgically Implanted Chip

<https://t.co/Piy8c5nK53>