

## ‘Designer babies’: Mitochondrial misinterpretation by the media

In [a six-minute segment](#) last week on CNN, the anchor Brooke Baldwin was so excited to talk about “designer babies” and playing God that she couldn’t let go, even when her guests tried to tell her to.

The story was prompted by an FDA meeting on the scientific issues concerning a new technique to prevent mitochondrial disease. This occurs when genetic mutations arise in the cellular energy factories called mitochondria. These are spread throughout the cytoplasm of a human egg—not in the nucleus. And their genomes are separate from the genes found in the nucleus, which are responsible for most of our genetic attributes and most genetic ailments. (Sperm are almost all nucleus and contain very little mitochondrial DNA.)

The idea considered by the FDA’s panel was that in a woman carrying mitochondrial mutations, the nucleus of her egg might be clipped out and inserted into another woman’s egg from which the nucleus had been removed, and which had normal mitochondrial DNA. The idea is interesting, and new, because it would create a child with genes from three individuals, not two. And this new combination would be passed to future generations—a so-called germ-line alteration.

It has nothing to do with “designer babies,” as Baldwin—or her producer—seemed to almost grasp. In explaining the technique, Baldwin said “doctors then take out the egg’s nucleus which contains, you know, factors like eye color, height, and gender.” See? The characteristics we might want to change to make “designer” babies—hair color, height, and gender—are in the nucleus, not the mitochondria.

But then when she questions her guests, she persists in suggesting that the technique could lead to designer babies. “Could there come a day when, you know, you have this parent that says, ‘Hmm, I really like the idea of brunette, blue eyes, tall...’ Could we make that baby happen? How will we make sure that doesn’t happen, that we don’t play God?”

She’s mostly right. But in the stories I read, the reporters conjured up the eugenic future themselves. Who needs medical ethicists and commentators?

**Read the full, original story:** [CNN’s Brooke Baldwin wants to talk “designer babies,” even if her guests don’t](#)

### Additional Resources:

- [Three parent baby debate: FDA ponders mitochondrial manipulation and, perhaps, germline modification too](#), Genetic Literacy Project
- [British ‘3-parent’ IVF babies could come as early as 2015](#), Genetic Literacy Project
- [“Designer babies on the way?” In China, scientists attempt to unravel human intelligence](#), CBS News