

Now a Reality, Should Genetically Modified Babies Be Prohibited?

By [Leonardo Blair](#)

March 23, 2013|1:41 pm

After an announcement last year that a series of experiments in the United States had resulted in the birth of 30 healthy genetically modified babies, genetics experts are now debating whether or not further development of designer offspring should be banned.

Just 16 years ago, the concept of genetic perfection was the stuff of Hollywood movies like "Gattaca." Fast forward to just over a month ago, however, and experts were busy debating over whether genetically engineered babies should be prohibited in a session hosted in New York City by [Intelligence Squared U.S.](#)

Arguing for prohibition were Professor Sheldon Krimsky of Tufts University and chair of the Council for Responsible Genetics, and Lord Robert Winston, professor of Science and Society and emeritus professor of Fertility Studies at Imperial College.

Arguing against prohibition was Nita Farahany, professor of Law and Philosophy and professor of Genome Sciences & Policy at Duke University. Filling out her team was Princeton University professor and author Lee Silver.

Among the audience who were asked to vote on the debate question before and after the presentations was Jim Watson, one of the discoverers of the structure of the double helix DNA.

In his opening arguments, Krimsky told the audience: "Enhancement through genetic engineering of human germ plasm is a fool's paradise and will lead to no good."

His first objection to the research was the fact that it would require clinical trials. "No set of animal studies can ensure the safety and efficacy of human prenatal genetic modification. It is unimaginable that any humane, democratic society would permit such a trial with public or private funds; the risk would so outweigh the societal benefits," argued Krimsky.

He further argued that traits being considered for genetic modification could not be simply enhanced by a modification of one or two genes. "Traits like intelligence, personality, muscle tone, musicianship ... are complex and not only involve dozens if not hundreds of genes but are the result of nutrition, social and environmental factors, genetic switches that are outside of the DNA and the gene-gene interactions that occur in human cells," said Krimsky. "Scientists and the so-called transhumanists who believe that it is possible think of the human genome as a Lego set, where pieces of DNA can be plugged in or out without interfering with the other parts of the system. Actually, the human genome is more like an ecosystem where all the parts interrelate and are in mutual balance."

He also contended: "The idea of genetic enhancement grows out of a eugenic ideology that human perfection can be directed by genetics.

"The danger is not so much that it will work, but as a myth, it will have social power that can be used by those who have wealth and resources to make others believe that to be prenatally genetically modified makes you better."

In her opening remarks, Farahany asked the audience to vote against a complete ban on the genetic engineering of babies and argued that there are many instances where genetic engineering is legitimately necessary, saying it "is no different in kind from the many ways that we already engineer our children, from the partners we choose to prenatal screening to the supplements we take that impact our children and their fates."

She highlighted new research showing that administering folate to women during pregnancy reduces the incidence of autism in children but no one wanted to ban folate. "... I want to convince you that we already can and have taken the next step of genetic engineering of babies and that we would take a drastic step backwards to ban outright that technology," argued Farahany.

Mitochondria provides energy for the proper functioning of human cells and about two percent of human DNA is mitochondrial. "About one in 5,000 babies born have problems with their mitochondrial DNA that cause rare but incredibly serious disease, including heart failure, dementia, blindness, severe suffering and death," said Farahany.

The 30 healthy genetically modified children noted at the beginning of this story, she noted, were treated through mitochondrial transfer and they were all born free of mitochondrial disease as a result.

A complete ban on the science that could help babies in this case would only serve to drive the science into dangerous underground conditions that wouldn't be as helpful if people are allowed to seek private help, Farahany further explained.

At the end of the debate which lasted for approximately two hours, the [audience voted against prohibition](#).

Source URL : <http://www.christianpost.com/news/now-a-reality-should-genetically-modified-babies-be-prohibited-92455/>