

Biotechnology from bench to business

Designer Babies Debate Heats Up

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Could you envision a world without genetic diseases, where parents could control their child's height, muscle strength, eye color, personality, and even intelligence? Some might consider this a tempting endeavor while others see it as a horrifying science fiction novel turning into reality. The topic of the most recent Intelligence Squared U.S. debate, Prohibit Genetically Engineered Babies, sparked a heated discussion on whether or not this science should be banned. Even if the science were perfected, would human genetic enhancement be considered morally wrong?

The team arguing for the motion to prohibit genetically engineered babies was Sheldon Krimsky, a professor at Tufts University and chair of the Council for Responsible Genomics, and Robert Winston, professor at Imperial College London. Arguing against the motion was Nita Farahany, professor at Duke University, and Lee Silver, professor at Princeton University.

Krimsky argued that there are less ethically controversial and more dependable methods of preventing the birth of a child with a severe genetic abnormality by using prenatal embryo diagnosis, with the exception of mitochondrial disease.

"The idea of genetic enhancement grows out of a eugenic ideology that human perfection can be directed by genetics," said Krimsky. "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."

Arguing against the ban, Farahany explained how women with a high level of mitochondrial abnormality will be able to have their own healthy genetic children through genetic engineering of the babies through two techniques: pronuclear transfer and maternal spindle transfer that safely eliminate the risk of these diseases. She raised the question, what distances will women afflicted by mitochondrial disease travel to safeguard their children? "Reproductive tourism is already rampant, where women and couples are traveling to foreign countries to gain access to reproductive technologies banned in their own countries," said Farahany.

In your opinion, are genetically engineered babies ethical? Should there be an outright ban or is the science worth exploring for health reasons? Aside from resistance to disease, would you want to enhance your child with desirable traits?