

Bioethics and Genomics: Representation in Popular Culture

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Gender, Race, and the Complexities of Science and Technology
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Gattaca (1997)
“A genetically inferior man assumes the identity of a superior one in order to pursue his lifelong dream of space travel” (IMDb, 2009).

[Gattaca Clip](http://www.youtube.com/watch?v=9xY1ke6KNcY)

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Genetic Engineering v. Genetic Enhancement

- How does the clip accompanying this guide address genetic engineering? How does it address genetic enhancement? Is the argument presented convincing?
- Do you believe that this technology would be available to everyone? Would race, class, gender and/or nation complicate genetic enhancement and engineering? How could access to this technology change dynamics within communities, neighborhoods, states, nations and international relations?

Genetic Discrimination

- What racialized and gendered themes are explored in the clip accompanying this guide? What is the significance of the actors used in the scene? How does line delivery in this scene foreshadow underlying themes of prejudice and discrimination explored in the film?
- Could genetic information be used against you? Compare genetic discrimination to other forms of discrimination (physical disabilities, diseases, HIV status, learning disabilities, etc.)

Fueling the Abortion Debate

The following section is from the article “**Genetic Testing + Abortion= ???**”

The New York Times

Published: May 13, 2007

SARAHLYNN LESTER, 32, considers herself a supporter of abortion rights. She gives money to the National Abortion Rights Action League and volunteers for Planned Parenthood.

But as a woman who continued a pregnancy after learning that her child would have Down syndrome, she also has beliefs about the ethics of choosing, or not choosing, certain kinds of children.

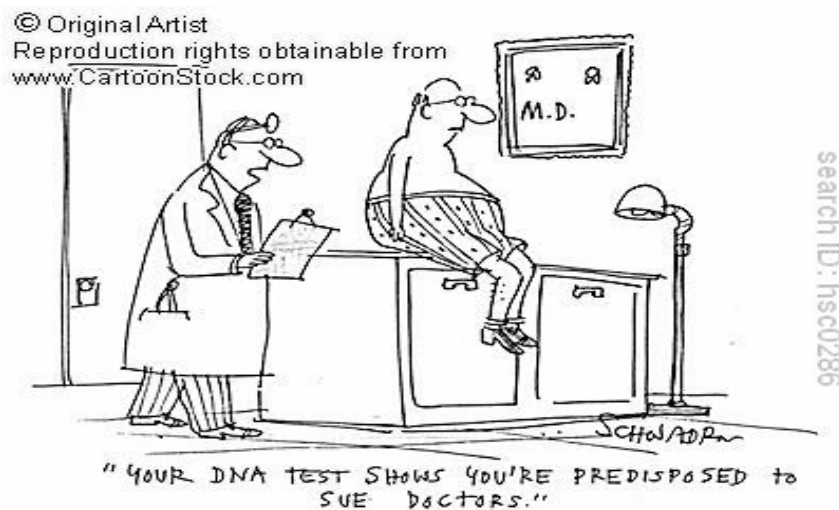
“I thought it would be morally wrong to have an abortion for a child that had a genetic disability,” said Ms. Lester, a marketing manager in St. Louis.

As prenatal tests make it possible to identify fetuses that will have mental retardation, deafness, early-onset Alzheimer’s disease and a range of other conditions, such personal deliberations are adding a new layer to the fraught political debate over abortion.

Abortion rights supporters — who believe that a woman has the right to make decisions about her own body — have had to grapple with the reality that the right to choose may well be used selectively to abort fetuses deemed genetically undesirable. And many are finding that, while they support a woman’s right to have an abortion if she does not want to have a baby, they are less comfortable when abortion is used by women who don’t want to have a particular baby.

“How much choice do you really want to give?” asked Arthur Caplan, chairman of the department of medical ethics at the University of Pennsylvania School of Medicine. “That’s the challenge of prenatal testing to pro-choicers.” (Harmon, 2007).

- Is there a line between a woman’s right to access control over her body and discrimination based on genetically undesirable traits? How could genetic testing make gender dialogues more complex?



A Changing Society

- What new challenges has genetic testing produced for members of medical, law, academic and theological communities? Will power dynamics be altered as this technology advances? What steps are necessary for advancing genetic technology along humanitarian lines?

Bolnick, D. A. et al. (2007). The science and business of genetic ancestry testing. *Science* 318(5849), 399-400.

DeVito, D. (Producer), & Niccol, A. (Director). (1997). *Gattaca* [Motion Picture]. United States: Columbia Pictures.

Harmon, A. (2007, May 13). Genetic testing + abortion =??? New York Times (New York, NY). Retrieved March 18, 2009 from <http://www.nytimes.com/2007/05/13/weekinreview/13harm.html>

Lee, S. S. et. al. (2008). The ethics of characterizing difference: Guiding principles on using racial categories in human genetics. *Genome Biology*, 9(7). Retrieved March 18, 2009 from <http://genomebiology.com/2008/9/7/404>

Lee, S. S. & Mudaliar, A. (2009). Racing forward: The genomics and personalized medicine act. *Science* 323(5912), 342.