

# Genetics and Justice: Implications of New Genetic and Reproductive Technologies



Designer Genes and the  
Implications for Women of Color

Jamie D. Brooks

Center for Genetics and Society

Presentation at SisterSong's "Let's Talk About Sex" conference

Chicago, IL, June 1, 2007

## Context



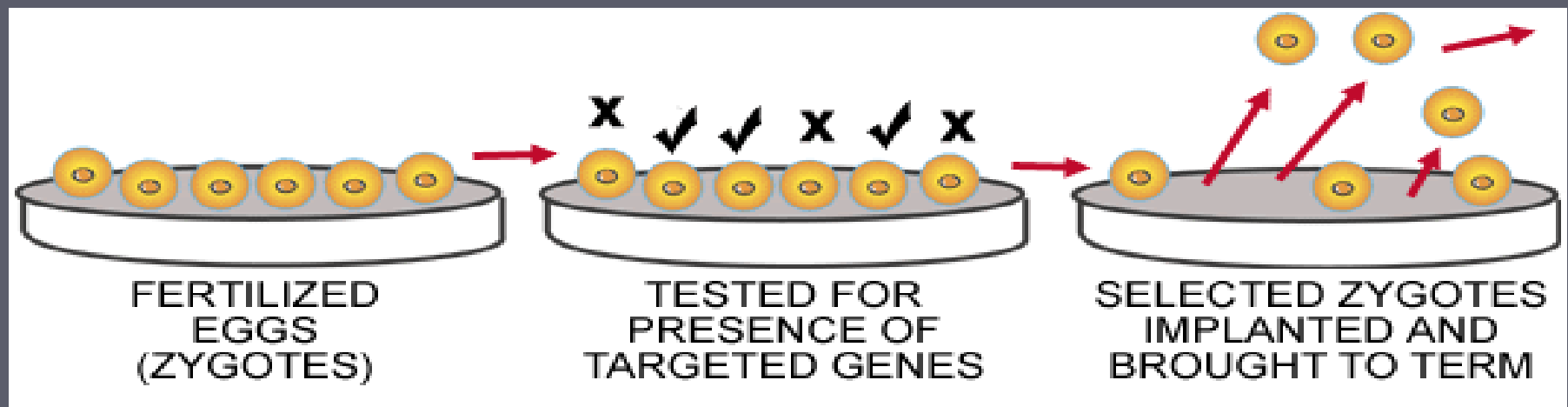
Emerging genetic and reproductive technologies are:

- Developing without critical dialogue – no organized social justice, racial justice, environmental justice or reproductive rights perspective
- Impacting all of our communities – across race, class, internationally
- Market driven – commercialization of science & health
- Search for technological fixes for social & environmental problems

# Pre-implantation genetic diagnosis (PGD)



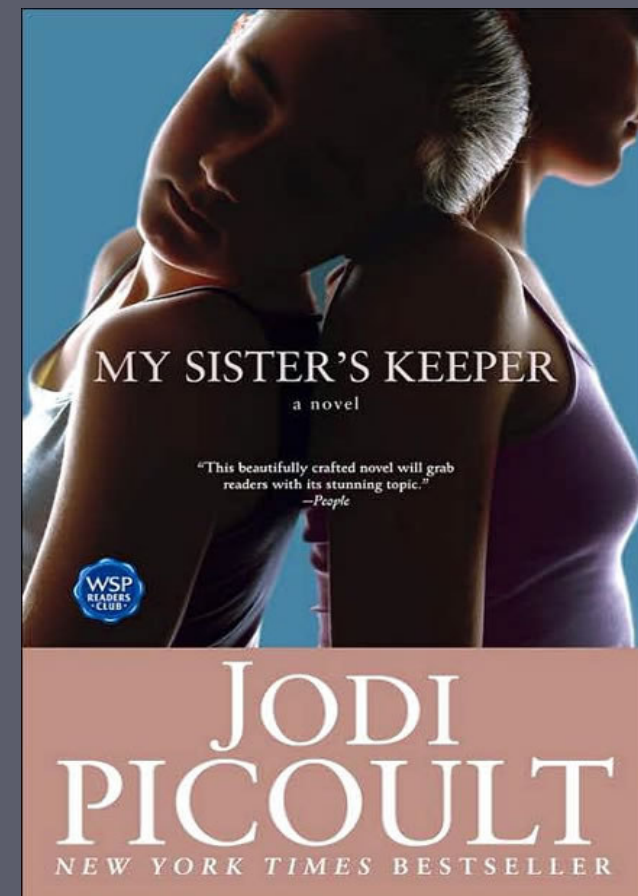
- In-vitro egg fertilization
- At day 3 (8 cells) a cell is extracted for testing
- Only selected (desired) embryos implanted



# Pre-implantation genetic diagnosis (PGD)



- Developed for genetic “disability” de-selection
- More recently –
  - Sex selection
  - Late (adult) on-set diseases –
    - Alzheimer, diabetes
  - Tissue match for existing child needing transplant
  - “Best” embryos, not healthy embryos
- Normalizes genetic selection and desirability



# Pre-conception sex selection



- MicroSort® -- sorts sperm cells carrying Y-chromosome (male) from X-chromosome (female)
- Ads in *NY Times* and in-flight magazines

The MicroSort® Gender-Selection Program at GIVF

### Do You Want To Choose the Gender Of Your Next Baby?



If you want to choose — or need to choose — whether your next baby is a girl or a boy, you may qualify for the MicroSort® gender selection procedure at the Genetics & IVF Institute (GIVF).

Prospective parents come from all over the world to GIVF in suburban Washington, DC. They choose this exclusive *scientifically-based* sperm sorting gender selection procedure, currently in an FDA clinical trial, for several important reasons:

- For prevention of genetic diseases
- For family balancing
- Results so far show 90% success rate for achieving girls and 75% for boys.
- FREE MicroSort for qualifying patients who use Donor Egg or Preimplantation Genetic Diagnosis at GIVF.
- For sensitive, personal attention from a caring staff of professionals, dedicated to the success of your family.

Couples also choose the Genetics & IVF Institute because we are the world's largest integrated provider of infertility and genetic services. Our expertise in the diagnosis and treatment of complex genetic and reproductive disorders is second to none.

To learn more about the Genetics & IVF Institute, and how the MicroSort® technology may help you select the gender of your next child — please visit us at:

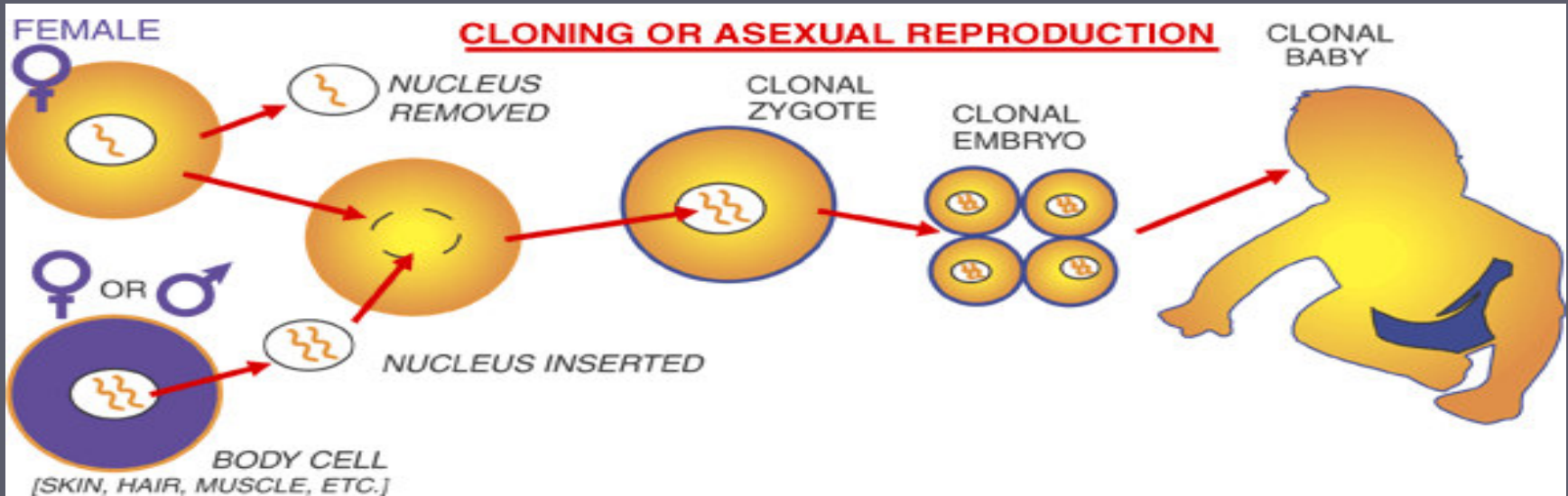
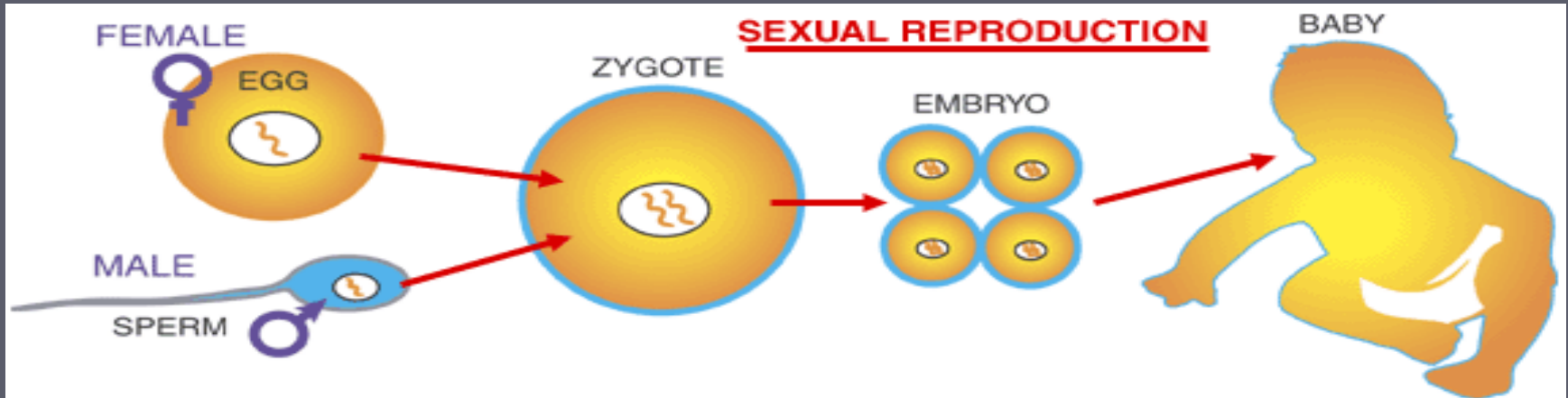
**www.givf.com**  
or call us at  
**1-800-277-6607**

*Now available in New York and other metropolitan areas through collaborating physicians. Call for details.*

**Caution:** This procedure uses an investigational device limited by federal law to investigational use.

GENETICS & IVF INSTITUTE 

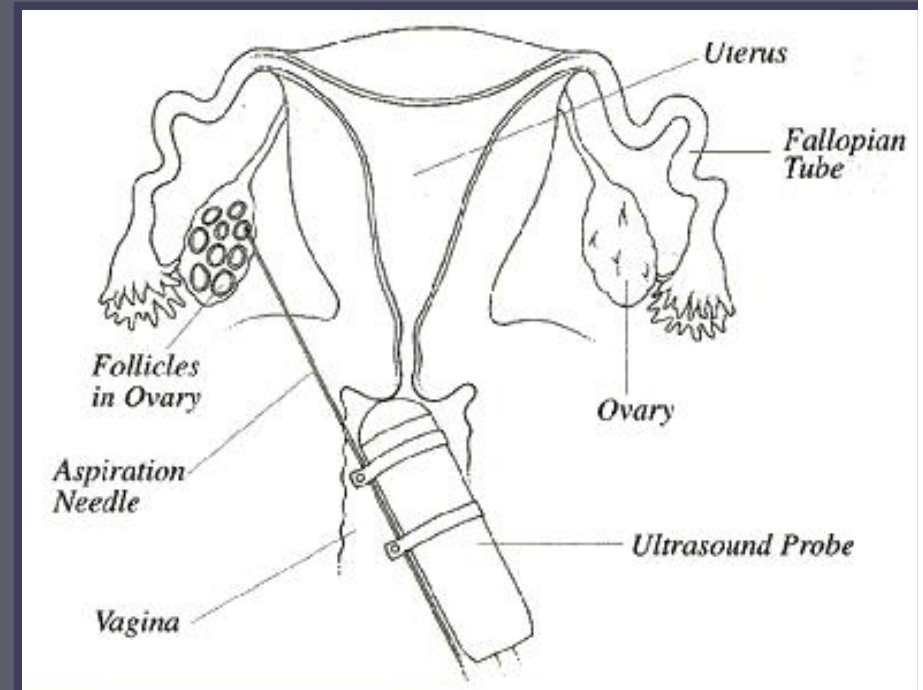
# Cloning



# Egg retrieval



- Hormones used to “shut down” and “hyperstimulate” women’s ovaries to produce multiple eggs
- Some adverse health reactions
- No data on long-term health risks



# Eugenics



- What is eugenics:
  - “Improving human species through genetics”
  - Selectively “breeding” the human population
- Eugenicians have been historically pro-science & pro-modernity

# Eugenic methods



<b>Past</b>	<b>Present</b>	<b>Future</b>
<ul style="list-style-type: none"><li>✓ Forced breeding</li><li>✓ Sterilization</li><li>✓ Genocide</li><li>✓ Segregation</li><li>✓ Restrictive immigration</li><li>✓ Forced abortion</li><li>✓ Infanticide</li><li>✓ Dangerous contraceptives</li></ul>	<ul style="list-style-type: none"><li>✓ Methods of past practices plus</li><li>✓ Sex selection</li><li>✓ Embryo screening</li><li>✓ Selective abortion</li><li>✓ Gamete donor selection</li><li>✓ “Family” eugenics</li></ul>	<ul style="list-style-type: none"><li>✓ Methods of past practices plus</li><li>✓ Increase pre-implantation diagnosis &amp; screening</li><li>✓ Reproductive cloning</li><li>✓ Inheritable genetic modification</li><li>✓ “Designer babies”</li></ul>

# “Reproductive Oppression”



- Historical examples of reproductive oppression
  - Sterilization abuse of American Indian, African American, Puerto Rican and Mexican American women
  - Testing oral contraceptives on Puerto Rican women
- Current examples/potential for reproductive oppression
  - “Renting wombs:” India
  - “Outsourcing” for eggs: UK to Romania

# Concerns about new technologies



- Health equity and access – “designer medicine”
- Geneticization of race and difference
- Reproductive health, rights and justice of women – exploitation of women’s bodies and reproductive capacity
- Racial justice, environmental justice being impeded by encoding inequality into our DNA
- Lack of oversight, regulation and public debate
- International: reproductive tourism and markets

# Implications?



- What are the implications of these new technologies for women?
- Who is “choosing” and at what cost to women and society?
- What will be the particular impact of these new technologies on women of color and low-income women and their ability to control their reproductive decisions & experiences?