

# The Fading "Gay Gene"

The following article by Matthew Breilis was published on February 7, 1999 in The Boston Globe.  
This excerpt is reprinted courtesy of that publication.

The research project in 1993 that indicated many gay men shared a common genetic marker in the x chromosome was hailed as a momentous scientific discovery—one that would help society to transcend bigotry, heal family wounds, and lay to rest the nagging question: Is sexual orientation genetic?

The idea of a "gay gene" offered an ironclad defense of homosexuality; if it was genetically predetermined, then being gay could not be cast as "deviant" behavior, something "correctable."

T-shirts emblazoned "Thanks for the genes, Mom!" were sold in gay and lesbian bookstores. Many gay activists and editorial writers predicted the discovery would give homosexuals greater legal standing to fight discrimination.

Six years later, however, the gene still has not been found, and interest in—and enthusiasm for—the "gay gene" research has waned among activists and scientists alike. And there is a growing consensus that sexual orientation is much more complicated than a matter of genes.

Dr. Richard Pillard, a professor of psychiatry at Boston University School of Medicine who was involved in a study of twins and sexual orientation, has done research showing that sexuality is greatly influenced by environment, and that the role of genetics is, in the end, limited.

According to Pillard's findings, a gay man's fraternal twin had about a 22 percent chance of being gay; an adopted sibling had a roughly 9 or 10 percent chance; and a person selected by random draw has a 3 or 4 percent chance. The message: Environment—in this case, the environment that adoptive siblings share—clearly helps to shape sexuality.

Pillard offers a further bit of evidence on the limited (although still significant) influence of genes: With identical twins, if genes were everything, you would expect a 100 percent overlap in sexuality; in other words, if one twin was gay, so, too, the other. But identical twins shared sexual orientation only 50 percent of the time, he reports, and statistics for lesbians are similar.

Dean Hamer, the molecular biologist at the National Cancer Institute who led the 1993 study (and its validation study in 1995), believes a gay gene does exist and will be found within five years. But he also acknowledges the limits of genetic predisposition. For example, he has been unable to find in women the same genetic marker found in some gay men. "Clearly," Hamer says, "there is a lot more than just genes going on."

In fact, he says, "It is the same for every human behavior: Environment matters for extroversion, smoking cigarettes, just about anything you can name.

"What is not known is what about the environment is important. And for that," he says, "we are just as clueless as we were 100 years ago."

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One reason the gay community has cooled to the idea of a "gay gene" is that a justification of sexuality is no longer seen as so important. Indeed, a fuller picture of civil rights has emerged.

"Our position is that, to us, [the gene] may be a scientific question but it is not a political one," says Kerry Lobel, executive director of

the National Gay and Lesbian Task Force. "Gene or no gene, every person deserves full civil rights under the law."

Ruth Hubbard, a board member of The Council for Responsible Genetics, professor emeritus of biology at Harvard University, and the author of "Exploding the Gene Myth," says history is replete with discrimination for biological reasons...

"I think the job is to widen the range of acceptable behaviors and not to discriminate on the basis of who people choose to love and live with, and not invent biological reasons for it," she says.

Searching for a "gay gene," says Hubbard, is not even a worthwhile pursuit. "Let me be very clear: I don't think there is any single gene that governs any complex human behavior. There are genetic components in everything we do, and it is foolish to say genes are not involved, but I don't think they are decisive."

John D'Emilio, co-author of "Intimate Matters: A History of Sexuality in America," agrees. "I don't want to be in a position to say scientists should not do research, but it is not something that I would look for."

D'Emilio says he is skeptical about a genetic key unlocking understanding to sexual orientation because of cultural and historical evidence that points to "an immense malleability of human sexuality. In Western society, in the classical world, there were huge numbers of men who were married and also had ongoing homosexual relationships."

Still, despite there being little evidence for a biological basis for homosexuality—one group of Canadian researchers could not replicate Hamer's findings—it is something many Americans rush to embrace.

For the most part, says D'Emilio, that feeling comes from a "very noble and generous place. On the one hand, many American people, I think, would really like to embrace gay people and feel things that have happened to gay people are wrong. In open democratic societies, people should be accepted for who they are," he says.

"Culturally, however, homosexuality makes people uncomfortable. If people can be persuaded you are born this way, that you have no choice, it resolves a complicated moral issue."

But if genetics plays only a supporting role in determining our sexual orientation, it means there are no easy answers about where sexual orientation comes from, only questions about how we respond. ■