

“Homosexuality Is Not Hardwired,” Concludes Head of the Human Genome Project

By A. Dean Byrd, Ph.D, MBA, MPH

Reprinted with permission of the National Association for Research and Therapy of Homosexuality (NARTH)

Francis S. Collins, one of the world’s leading scientists who works at the cutting edge of DNA research, concluded that "there is an inescapable component of heritability to many human behavioral traits." However, he adds, "for virtually none of them, is heredity ever close to predictive."



In reviewing the heritability (i.e., influence of genetic factors) on personality traits, Dr. Collins referenced the research of Bocharov and McGue for the estimated percentage of these traits that can be ascribed to heredity.

The heritability estimates for personality traits were varied: General Cognitive Ability (50%), Extroversion (54%), Agreeableness (42%), Conscientiousness (49%), Neuroticism (48%), Openness (57%), Aggression (38%) and Traditionalism (54%).

Such estimates of heritability are based upon unbiased, careful analyses of studies conducted with identical twins. The studies lead to the conclusion that heredity is important in many of these personality traits. It is important however, to note that even in such studies with identical twins, that heritability is not to be confused as inevitability.

As Dr. Collins would agree, environment can influence gene expression, and free will determines the response to whatever predispositions might be present.

Dr. Collins succinctly reviewed the research on homosexuality and offers the following:

"An area of particularly strong public interest is the genetic basis of homosexuality. Evidence from twin studies does in fact support the conclusion that heritable factors play a role in male homosexuality. However, the likelihood that the identical twin of a homosexual male will also be gay is about 20% (compared with 2-4 percent of males in the general population),

indicating that sexual orientation is genetically influenced but not hardwired by DNA, and that whatever genes are involved represent predispositions, not predeterminations [emphasis added]."

The heritability estimates for homosexuality is substantially lower than General Cognitive Ability, Extroversion, Agreeableness, Conscientiousness, Neuroticism, Openness, Aggression and Traditionalism!

Dr. Collins noted that environment—particularly childhood experiences—as well as the role of free will and choice affect us all in profound ways. As researchers discover increasing levels of molecular detail about inherited factors that underlie our personalities, it's critical that such data be used to illuminate the issues, not provide support to ideologies.

Citing such dangers, Dr. Collins referred to the book written by activist Dean Hamer, who declared the discovery of the "God gene" (this same author also is associated with "discovering the gay gene").

Dr. Collins noted that the "evidence" in Hamer's book "grabbed headlines," but was "wildly overstated."

A reviewer in *Scientific American* suggested that Hamer's book on the "God gene" should have been titled, "A Gene That Accounts for Less than One Percent of the Variance Found in Scores on Psychological Questionnaires Designed to Measure a Factor Called Self-Transcendence, Which Can Signify Everything from Belonging to the Green Party to Believing in ESP, According to One Unpublished, Unreplicated Study."

Unfortunately, much of the research in areas such as homosexuality has been misrepresented; not only in the media, but also by the scientists themselves through a tendency to overestimate the quantitative contribution of their findings.

Regarding the contributions of genetics to areas such as homosexuality, Dr. Collins concluded, "Yes, we have all been dealt a particular set of cards, and the cards will eventually be revealed. But how we play the hand is up to us."

I agree.

Reference:

Collins, Francis S. (2006). *The Language of God, A Scientist Presents Evidence For Belief*. New York: Free Press.