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Nature vs. nurture

'Gay' gene pioneer tackles God

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IT'S IN THE GENES: Genetic researcher Dean Hamer, who discovered a "gay" gene in 1993, says he's singled out a "god" gene. A single variation in the gene affects people's consciousness or the way they perceive the world, and Hamer has linked that to spirituality.

WASHINGTON — Dean Hamer seemed to pour gasoline on the nature vs. nurture debate over sexual orientation when he discovered "the gay gene" back in 1993. But the latest work by the National Institute of Health researcher might be even more incendiary. It's out in a new book called "The God Gene: How Faith is Hardwired into Our Genes" (Doubleday).

His earlier work didn't identify a single gene responsible for making one gay, but rather a region of many genes on the X chromosome that correlates with an increased likelihood that males will be gay.

Soon hip gays were sporting T-shirts that read "Thanks Mom for Xq28" — the genetic region that he had identified.

Personality traits — from sexual orientation to smoking — are the result of a complex interplay of multiple genes and the environment, a back and forth that begins in the womb and continues throughout life, Hamer explained over coffee in his back yard one morning.

This time around, the "god gene" really is a single gene, VMAT2. It makes a protein that transports monoamines, a chemical in the brain. A single variation in the gene affects people's consciousness or the way they perceive the world, and Hamer has linked that to spirituality.

"All of the spiritual people, all of the great spiritual experiences involved seeing reality in a fundamentally different way," he said. "For a lot of people that is tantamount to nuttiness, or schizophrenia, or something like that, but it's a very intimate part of spirituality.

"With Paul — on the road to Tarsus — obviously, that was a very dramatic instance of that. Or when Mohammed went flying around in his dreams. But I think that it plays a role in people's everyday life too. Just sitting at the beach, looking at the waves, people can have spiritual experiences and it's because all of a sudden you just see the world in a little bit different light. I think that's pretty cool.

"Everything is not as it normally appears."

"Spirituality is measured by something called the self-transcendence aspect of personality," a category created by psychologists "that looks at things like, to what degree do people identify with the whole world around them, compared to just themselves," he continued. "And to what degree do people feel that everything in the universe is connected by some sort of spiritual force."

When Hamer compared people's behavioral and personality surveys with their DNA, a variation of the VMAT2 gene popped out as having a strong correlation.

"It's interesting, not because it is the gene that makes people believers or not, but because just finding that one gene, we think, tells us something about the whole brain biochemistry of spirituality; he said.

He says that VMAT2 is but one of what may well be hundreds of genes that play a role in spirituality.

Hamer carefully distinguishes between religion and the biological aspect of spirituality.

"Religion is a cultural phenomena where the rules are made up by man or come down from God, depending on your point of view, but they are things that you learn, things that can be changed culturally.

"The interesting thing about cultural stuff is that it is not necessarily stuff that is good for people; it's just good for the culture or the organization that creates it. Which gets into the people who profit from it, who are priests and bureaucrats.

When Hamer compared people's behavioral and personality surveys with their DNA, a variation of the VMAT2 gene popped out as having a strong correlation.

"I've always been interested in applying a scientific analysis to things that are really fundamental about people, like whether they are gay or straight, or whether they are spiritual or not."

But the government wasn't about to pay one of its scientists to study spirituality, a stance that Hamer readily supports.

His work on the god gene "is really a sort of leftover data or side effect" of a very broad scientific study of genetics and behavioral traits undertaken by a number of researchers working in collaboration.

"It really is just reanalyzing data that we had already collected for other purposes," and was done on his own time away from the office, he said. That's one reason why he hasn't published it as a scientific paper.

The field of behavioral genetics is a controversial one and Hamer has not shied away from that controversy. He says his scientific colleagues have been leery of it.

"They felt that way about sexual orientation, and they feel 10 times stronger about this," he said.

One of his bosses even suggested that he wait until after he retired to write about the god gene.

His work on the gay gene made him an anathema to the religious right. He doesn't think that the god gene will have the same effect.

"I don't see our findings as being anti-religious or pro-religious at all. If you believe in religion, then you will look at their research and say it establishes the truth that God gave us a specific mechanism for believing in religion; it's not just an afterthought, it's hard wired into our brains. But of course if you are anti-religious you can look at it another way and say, well this proves that religion isn't really coming from above, it's coming from inside."

Hamer says one practical application of this basic research may be to "support what people in AA and other groups have been saying for some time. You can have a higher power without being religious. That whole so-called spiritual approach towards keeping sober and clean is incredibly practical."

"Maybe this is a way that scientists can justify using a spiritual program, because scientifically it looks like something that should work," he said with a laugh.

Hamer acknowledges his skeptical view of religion because of the "competition between science and organized religion. I think that is in part because religion continues to try and intrude into areas where it really has no business, like scientific explanations of the world, controlling people's social behavior, etc."

When he first began exploring the issue he thought, "Well, it's just some other personality trait, it's like people are neurotic, they are afraid of things and that's why they turn to religion, or some people are stupid and that's the only way they can explain the universe."

But the experience has changed, if not quite transformed, him

"Writing this book really made me impressed with the power of spirituality and religion to an extent that I had not appreciated before," he explained. "The more I studied it the more I realized, this is absolutely here, forever, and it will never go away."

"The argument between science and religion really is an argument between science and the cultural part of organized religion. There is no conflict between science and spirituality. Indeed, some of the greatest scientists, like Einstein, were intensely spiritual. I think that many scientists feel that way."

"I'm a strong believer in the power of spiritual belief. I've seen that work in my own life. I've always said, it doesn't really matter what you believe in, as long as you believe. If you believe, it's good for you. It's better than being a cynical old queen your entire life," Hamer said with a laugh, "or even part of your life."

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