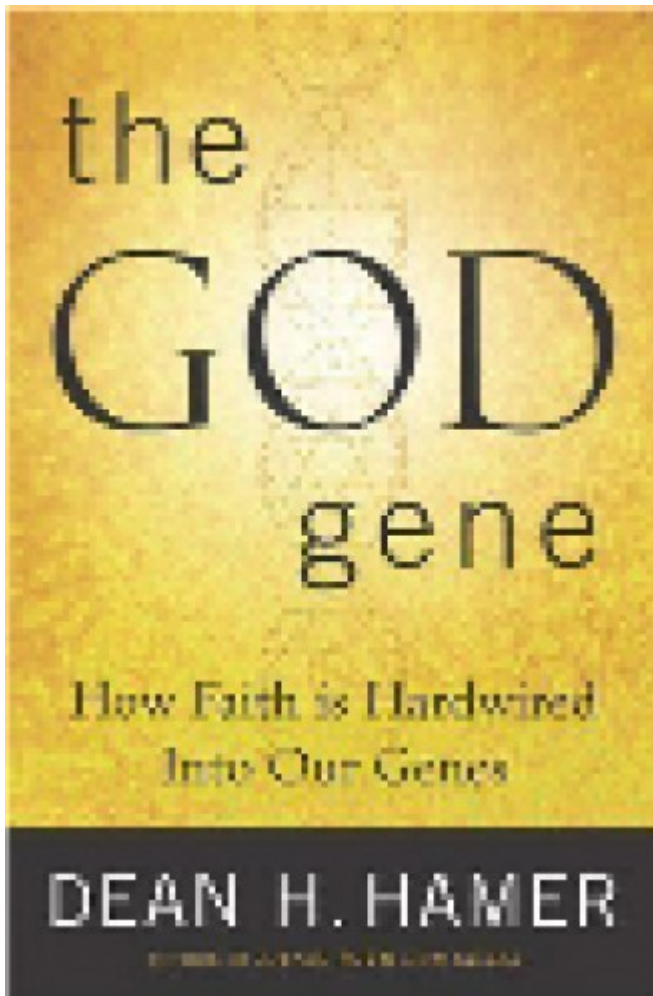


The God Gene:

reviewed by [Carl Keener](#) in the [May 31, 2005](#) issue

In Review



The God Gene: How Faith Is Hardwired into Our Genes

Dean H. Hamer
Doubleday

When pastors look over their congregations on a typical Sunday morning, what do they think of the skeptical Thomases, the dutiful Marthas, the reflective Marys, the

charismatic Johns and all the other persons making up a diverse group of worshipers? How do they explain such diversity, and what can they do when not all parishioners are equally soaking up their inspiring sermons? Are some persons really more spiritual than others? Do the varieties of religious experience, so ably portrayed by William James in his Gifford Lectures a century ago, spring from our various cultures or are they somehow rooted in our genetic makeup?

Dean Hamer argues that spirituality is in part genetically based. A behavior geneticist who became famous over a decade ago for his controversial work on the genetics of homosexuality, Hamer works at the National Cancer Institute of the National Institutes of Health, where his particular emphasis is on the genetics of cigarette smoking.

It's much more difficult to pin down a possible "God gene" than to show that addictive cigarette smoking has a genetic basis. Here's how Hamer constructed his argument: First, he defined spirituality as the capacity for self-transcendence, which includes three elements introduced by Robert Cloninger—self-forgetfulness (being "in the flow"), transpersonal identification (a sense of being "connected" to other things, which gives us a reverence for life) and mysticism (intuitive insights not explainable by science). Second, on the basis of Cloninger's Temperament and Character Inventory, Hamer analyzed various populations for their relative spirituality, focusing particularly on twins, both identical and fraternal. When the results were in, he searched for genes that control the production of certain monoamines, such as serotonin and dopamine, which help regulate our moods and, by extension, our spirituality. The heart of Hamer's argument is that a "sense of self is central to spirituality" and that it arises from the "distinctive brain process of consciousness" under the critical influence of various monoamines.

After undertaking these population studies and collaborating with other scientists, Hamer was able to pin down, out of roughly 35,000 genes, a variant gene called VMAT2, located on chromosome 10. VMAT2 is responsible for making a "protein that packages all of the different monoamines into secretory vehicles" and thus controls the relative amount of these signaling chemicals in the brain—an important element in the overall transmission of neural impulses and consequently in how we feel about things. As it turns out, there is an association between variations in the VMAT2 gene and capacities for self-transcendence: individuals with "C variants" scored higher on self-transcendence than individuals with "A variants." Hamer's preliminary results suggest that many more genes may also be involved in the capacity for self-

transcendence.

Hamer believes that “feelings of spirituality are a matter of emotions rather than intellect” and that “monoamines play a central role in consciousness.” God, he claims, is not known intellectually. Rather, we *feel* God, and it’s “our genetic makeup that helps to determine how spiritual we are.” Hamer contends that being spiritual is not to be confused with being religious or with belief in a particular god. The most important contrast between religion and spirituality, he argues, is that “spirituality is genetic, while religion is based on culture, traditions, beliefs, and ideas.” He cautions readers that he is attempting to explain why humans believe, not whether their beliefs are true.

Agreement or disagreement with Hamer is contingent in part on the degree to which one thinks human personality is rooted in our DNA or is shaped by all the influences making up our external environment. To hypothesize about these matters, one must persistently ask what the evidence is and must judge that evidence within some sort of framework, a background of beliefs undergirding how we see the world around us. Mystics, rationalists and hardheaded empiricists will likely see the world differently, but this is what the “God gene” is all about—certain people are just more spiritual than others.

The extent to which one’s relative self-transcendence has adaptive value also remains problematic. Clearly, much more research needs to be done. Hamer seems open to the criticism that his work is long on speculation and short on replication and critical tests.

Although *The God Gene* is generally well written, readers would have benefited from some judiciously placed illustrations. It could also be argued that the title overstates Hamer’s conclusions. Perhaps the book should have been called *A Preliminary Study of the Genetic Basis of Spirituality*. But then who would have bought it? Theologians may also wish that Hamer had identified with a particular vision of God or the divine, whether that of orthodox theism, process theism, pantheism or something else. Finally, I don’t think Hamer understands the scope of Thomas Altizer’s claims regarding the death of God.

These quibbles aside, there can be no question that genes influence human behavior, and it is quite possible that variations of the VMAT2 gene help to mold our response to the mysteries of life. It does appear that it’s hard for a skeptic to be

intensely spiritual, but that doesn't mean a skeptic can't be religious. It may just be that there is a genetic basis for the spiritual differences between persons who lift hands in church services and those who prefer not to.

Aside from speculations concerning the relationship between human evolution and the possible adaptive significance of human faith, or spirituality, *The God Gene* is full of interesting facts and case histories, and an excellent bibliography adds value. No matter what your views about the genetics of spirituality, *The God Gene* will make you think, and for that reason it is worth careful study, especially by pastors and others who are keenly interested in people's spiritual welfare.