

In the news

GENES KNOW THEIR LEFT FROM THEIR RIGHT

DOI:
10.1038/nrg2194

The first genetic association with human handedness has caught the media's attention, not least because the variant that predisposes to left-handedness is also associated with [schizophrenia](#).

Scientists at the Wellcome Trust Centre for Human Genetics in Oxford identified a haplotype that lies upstream of the leucine-rich repeat transmembrane neuronal 1 gene (*LRRTM1*) that predisposes to left-handedness when inherited from the father (*Molecular Psychiatry*, 31 July 2007).

'In right-handed people the left side of the brain usually controls speech and language, and the right side controls emotions. However, in left-handed people the opposite is often true, and the researchers believe the *LRRTM1* gene is responsible for this flip' (*BBC News*, 31 July 2007). Little is in fact known about the function of *LRRTM1*.

In a separate study population, the 'left-handed' haplotype was associated with schizophrenia, which, itself, "...is often traced to unusual balances of brain function..." (*Earth Times*, 1 August 2007). Although not always clear on the distinction between genes and alleles — "...carrying the gene may also slightly raise the risk of developing psychotic mental illness such as schizophrenia..." (*BBC News*, 31 July 2007) — most sources wisely quoted the caution of lead author Clyde Franks: "There are many factors which make individuals more likely to develop schizophrenia, and the vast majority of left-handers will never develop a problem."

While asymmetry and schizophrenia received attention, few sources alluded to the imprinted nature of this locus — "People appear to inherit the gene from their fathers..." (*National Geographic*, 1 August 2007) — or to possible differences between populations: the schizophrenia association was not replicated when the authors looked at a Han Chinese population.

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