

## Are mental disorders linked to the tweaking of genes in human evolution?

The same recent evolutionary changes that make humans prone to bad backs and impacted wisdom teeth may also tweak genes in ways that make people vulnerable to schizophrenia, bipolar disorder and other mental disorders, a new study finds.

Scientists have long suspected that common ailments like lower back, knee and foot pain are likely due to the evolution of upright walking in the human family tree.

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[Researcher David] Kingsley reasoned this vulnerability to mental disorders might also stem from recent evolutionary changes controlling human brain size and structure. To find out, Kingsley and his colleagues focused on DNA regions found in humans but not other animals.

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Specifically, the scientists focused on the gene for a protein called CACNA1C, which helps direct the flow of calcium in and out of cells. Calcium influences the electrical activity of neurons and helps control the release of the neurotransmitters that neurons use to communicate with each other. Previous research has tied CACNA1C to risks for both schizophrenia and bipolar disorder, as well as anxiety, depression, obsessive-compulsive symptoms and autism.

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The research team's analysis of the 1,000 Genomes Project's data suggested that changes in this particular region could be increasing or decreasing the activity of the CACNA1C gene in ways that might influence risk for mental disorders.

**Read full, original post:** [Could Human Evolutionary Changes Be Behind Mental Disorders?](#)