

What makes genes tick?

The expectation is that by uncovering the switches and genes they control, scientists can add depth to genetic findings like those from a schizophrenia study published last summer. Researchers identified 108 scattered genes associated with the mental illness, but could not explain how they were related to one another or worked in the brain. An understanding of the circuits that control these genes may give them the clues they need, the researchers said.

“How does this conspiracy of genes work?” asked Eric Lander, director of the Broad Institute, a genetic research center affiliated with Harvard and M.I.T., who is not an author of the new papers. “This begins to connect the dots.”

Researchers have long known that genes are only a small part of DNA — the rest contains switches that control genes. And researchers suspect that changes in these switches may have as much to do with diseases and with traits, like height or weight, as changes in genes themselves. Ninety percent of DNA alterations associated with diseases are turning out to be in gene switching areas, not the genes themselves. Scientists say they urgently need a map for understanding those circuits.

Read full, original article: [Project Shed Light on What Drives Genes](#)