2nd gene linked to fragile X retardation

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Researchers in Florida have discovered a new gene that appears to contribute to fragile X syndrome, the major cause of genetic retardation.

Ahmad Khalil, a Scripps Florida research associate, said the FMR4 gene shuts down in people with fragile X syndrome just as the previously identified FMR1 gene does, The Palm Beach Post reported.

"We felt that FMR1 by itself was not sufficient to explain all the symptoms and all of the variability that we observe in fragile X patients," Khalil said.

Because the FMR4 gene has so far been found only in primates, it could also provide clues to the evolution of the human brain, researchers said.

Fragile X syndrome appears in one in 4,000 boys and one in 6,000 girls. Khalil and his adviser, Claes Wahlestedt, began looking for a second gene on the X chromosome close to the FMR1 gene.

The newspaper said the discovery is a major step for Scripps Florida, which was founded in 2004 as a branch of the Scripps Research Institute. Scripps Florida is in a temporary home at Florida Atlantic University while its own campus is being built next door.