Colombian town with world's largest Fragile X cluster likely linked to 18th century founder

A semirural Colombian town called Ricaurte, about 150 miles southwest of Bogotá, may be home to the largest recorded genetic cluster of people with mutations linked to <u>fragile X syndrome</u>, according to a new <u>study</u>.

About 1 in every 19 men and 1 in every 46 women in Ricaurte have fragile X syndrome. Men there have 323 times the odds of having the condition compared with the general population, and women 192 times.

The cluster may be the result of a 'founder effect' from settlers who established the town in the late 1700s, the researchers say.

"It's a problem that originated from one of the founders who brought the mutation, and it expanded to other families," says lead investigator <u>Wilmar Saldarriaga</u>, professor of medical genetics.

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Because most of the people with fragile X in Ricaurte are native to the town, their mutations may trace back to a common set of ancestors. Ricaurte is thought to have been founded by 11 families, one from Spain and the rest from other parts of Colombia.

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In the meantime, several Ricaurte residents with a premutation show signs of ovarian insufficiency, including early menopause, or of fragile X-associated tremor/ataxia syndrome, such as tremors.

Studying this population may provide insight into why only some people with the premutation develop these features.

Read full, original post: 'Founder effect' may have fueled fragile X cluster in Colombian town