Omicron genetic surprise: Its family tree traces back more than a year

Just as people who want to find out their ancestry — were their forebears Nordic? Mongol? — can find traces of that lineage in their genes, the virus's genome contains clues.

"It's been very common to use an evolutionary tree — or a family tree — of these SARS-CoV-2 viruses to catch introductions in places like Australia and Taiwan that have not had a lot of local spread," says [computational virologist Trevor] Bedford. "You can figure out where the importations are coming from by looking at the viral genome and checking, 'Is it close in its sequence characteristics to [strains] that are circulating elsewhere?"

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Bedford says that when you look at the family tree for this omicron variant, there's something surprising: "With omicron, your closest sequences are back from mid-2020 — so over a year ago. That is very rare to see."

In other words, while scientists can tell that this variant evolved from a strain that was circulating in mid-2020, in the intervening months there has been no trace of all the intermediate versions that scientists would have expected to find as it morphed into its current form.

"It doesn't tie into anything that was circulating more recently," says Bedford.

This is an excerpt. Read the original post here.