

Australasian genetic influence spread wider in South America than previously thought

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A team of researchers from Universidade de São Paulo, Universidade Federal do Rio Grande do Sul and Universitat Pompeu Fabra, has found evidence of a genetic Australasian influence in more parts of South

America than just the Amazon. In their paper published in *Proceedings of the National Academy of Sciences*, the group describes their study of a genomic dataset from multiple South American populations across the continent.

Back in 2015, a team of researchers found what they described as an Australasian influence in native people living in the Amazon. They had found what they described as a Ypikuéra population signal—a genetic marker associated with early people living in Australasian—the region that is now South Asia, Australia and Melanesia. Since that time, researchers have developed theories to explain how such a signal could have been introduced into people living in South America, especially considering it has not been found in early people living in North America. Currently, most in the field believe that both North America and South America were populated by people migrating overland from Asia to Alaska and then traveling south. In this new effort, the researchers have found that the Y signal also appears in native people in South America in areas outside of the Amazon.

The work involved collecting [blood samples](#) from native people all across the mid-section of the South American continent and then conducting a genetic analysis of each. In all, they studied samples from 383 people which included 438,443 markers.

The researchers found the Y marker in native people living on the Brazilian plateau in the center of the country and also in those living in the western part of the county—and they also found the signal in the Chotuna people of Peru. The findings suggest migrations of people with the Y signal were far more widespread in South America than were thought. Their findings also suggest that two waves of such migrations occurred. This has led to scrutiny of previous theories regarding how such individuals arrived in South America and why the signal has not been found in early North American people. Some have suggested it is

because those in North America were wiped out by European colonists. Others have suggested that it is more likely that closer study of North American [native people](#) will eventually find some with the Y signal. And finally, the hardest theory to swallow is the possibility that early people from Australasia somehow made their way directly to the shores of South America.

More information: Marcos Araújo Castro e Silva et al. Deep genetic affinity between coastal Pacific and Amazonian natives evidenced by Australasian ancestry, *Proceedings of the National Academy of Sciences* (2021). [DOI: 10.1073/pnas.2025739118](https://doi.org/10.1073/pnas.2025739118)

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