

The Associated Press news article highlights a recent study that links a specific gene to historical originations of verbal communication found in humans, proposing that this discovery can bring solutions to individuals with speech disorders. Darnell, the author of the primary study, claims that the protein, NOVA1, has been involved in brain development since the 1990s. With CRISPR gene editing, the NOVA1 protein present in mice was replaced with the protein that is exclusively the human type (FOXP2), altering the vocal communication of the mice. FOXP2 is a protein that is involved in human language; however, it was discovered that the variant is common to other species, whereas NOVA1 was exclusively found in humans.

The article entirely focuses on genetics considering that the bulk of the text provides sufficient detail on the conducted primary study. The article additionally goes into detail of the language gene variant and the method that discovered this conclusion (CRISPR technology). Given that the article directly hyperlinks the study, the news article provides accurate information on the study's main points. However, the article does have gaps of knowledge that are essential to clarify the study further. The author does not add anymore additional information on the NOVA1 and FOXP2 proteins as well as the other study from the Neanderthals that was briefly mentioned.

## **References**

Tajima, Y., et al. A humanized NOVA1 splicing factor alters mouse

vocal communications. *Nature Communications*. 16, 1542 (2025).

Ungar, L. (2025, February 18). Researchers link a gene to the emergence of spoken language. *Associated Press*.