The gene FOXP2 has been in the news ever since it was revealed in 1998 that the members of an extended London family who had a serious language impairment also had an abnormal version of that gene. In a letter in today's (November 12) edition of Nature, a team led by Daniel Geschwind of UCLA reports that they inserted the chimp and the human versions of the gene into human brain cells and looked at expression of the genes that the protein regulates. They found that the human version increased the expression of 61 genes and decreased the expression of 51 genes compared with the chimp version of the protein. "These data," they write in the abstract, "provide experimental support for the functional relevance of changes in FOXP2 that occur on the human lineage, highlighting specific pathways with direct consequences for human brain development and disease in the central nervous system. Because FOXP2 has an important role in speech and language in humans, the identified targets may have a critical function in the development and evolution of language circuitry in humans."

More in Nature News. An interview with Dan Geschwind can be heard here, and the 2008 Francis Crick Prize Lecture by Simon Fisher on "A molecular window into speech and language" visible here provides useful background.