

Elephants can attribute superior smell to genes

Compared with 13 other mammal species studied, African elephants have the most genes related to smell: 2,000.

That's the most ever discovered in an animal—more than twice the number of olfactory genes in domestic dogs and five times more than in humans, who have about 400, according to research published July 22 in the journal *Genome Research*. The previous record-holder was rats, which have about 1,200 genes dedicated to smell.

Why so many? “We don’t know the real reason,” study leader Yoshihito Niimura, a molecular evolutionist at the University of Tokyo, said by email. But it’s likely related to the importance of smell to the poorly sighted African elephant in interpreting and navigating its environment.

For instance, smell is a crucial sense for the functioning of an elephant trunk, which acts like a hand as it grips food and other objects.

“They use olfaction to quest the outer world, which may drive [their] superior sense of smell,” Niimura said.

“Imagine the situation [in which] we have a nose on our palm!”

Read the full, original story: [Elephants Have 2,000 Genes for Smell – Most Ever Found](#)