

Smell something? Ask the rat -- he 'nose'

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A Bangalore, India, neuroscientist says he's found rats smell in stereo, with each nostril operating independently of the other.

Stereo sniffing likely gives rats a leg up in everything from tracking down a meal to evading an enemy, said Upinder Bhalla of the National Center for Biological Sciences in Bangalore.

"Imagine you have a predator sneaking up on you," he told National Geographic News during an e-mail interview. "If you can smell in stereo, you can detect and localize it in one sniff, and you'll have a decent chance of getting away. If you have to look around, or take multiple sniffs to find the predator, you may get eaten."

He said his study provides insight into the spatial dimension of smell and the speed at which the brain operates.

Once trained, rats in the study could determine the direction of a smell in as little as 50 milliseconds. According to a 1992 study, one sniff takes humans about 700 or more milliseconds to process.

Bhalla is a co-author of the study reported in the current issues of the journal *Science*.

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