

Human olfactory perception embeds fine temporal resolution within a single sniff. Wu Y, Chen K, Xing C, Huang M, Zhao K, Zhou W. Nat Hum Behav. 2024 Nov;8(11):2168-2178. [Article](#).

Re-interpretation based on the IPL mechanism

A study by Wu et al., found that it is possible to discriminate two odorants sniffed at 60 milliseconds interval (Wu et al., 2024). The mechanism of perception should be able to provide explanatory evidence to support this finding. Perception of changing environmental stimuli, when an animal moves, occurs by rapid reversible formation of IPLs ([Vadakkan, 2015](#)). In other words, after perception IPLs are expected to reverse back immediately to independent spines. This facilitates formation of different sets of IPLs with the arrival of the new set of sensory stimuli. In Wu et al.,'s study, second odorant generates different sets of IPLs in the olfactory cortex to form different perceptons generating inner sensation of perception of the second odor.