

Molecular basis for chemosensory-mediated behavior

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The sense of smell plays a significant role in regulating various behaviors, including feeding and social interactions, in many animals. The identification of specific chemical cues, including pheromones and their receptors has provided a useful model for studying how sensory inputs are converted into specific behaviors. In this talk, I will present our research on intraspecific chemical communication in mice, primates, and humans. First, I will discuss the pheromones, receptors, and neural circuits that elicit sexual and social behavior in mice. Second, I will present the first pheromone candidates in a primate species. Finally, I will discuss the human body odorants involved in infant-mother and male-female communication, which have positive physiological, psychological, and behavioral effects in humans.