

## 〈シンポジウム II〉

### 『感覚から香粧品の価値を考える』

# 嗅覚：フェロモンなどの匂いを介したコミュニケーション

篠原一之\*, 西谷正太

## Human Communications *via* Pheromones

Kazuyuki SHINOHARA\*, Shota NISHITANI

### Abstract

Whether pheromone signaling exists in humans is still a matter of intense discussion. In this review, the likelihood of pheromonal communication in humans is assessed with a discussion of the vomeronasal system is functional in humans; and the possible ways pheromones operate in humans. Although the vomeronasal organ (VNO), a putative pheromone receptor organ, has been implicated in the reception of pheromones in many vertebrates, it is not the only pathway through which such information has access to the central nervous system. In fact, the main olfactory system also detects pheromones. In addition, an important caveat for humans is that critical components typically found within the functioning vomeronasal system of other, nonprimate, mammals are lacking, suggesting that the human vomeronasal system does not function in the way that has been described for other mammals. Therefore, linking detection of pheromones with the vomeronasal system as pheromones is a non sequitur. Thus, in the years since the introduction of pheromones, the extensiveness of the concept has expanded. In a broader perspective, pheromones can be classified as primers, signalers, modulators, and releasers. Examples include affects on the menstrual cycle (primer effects); olfactory recognition of newborn by its mother (signaler effects); individuals may exude different odors based on mood (suggestive of modulator effects); breast crawl of newborn (releaser effects).

**Key words:** human pheromone, body odor, vomeronasal system.