1. Record Nr. UNINA9910161647403321

Autore	Thomas Endres
Titolo	Scents that matter - from olfactory stimuli to genes, behaviors and beyond
Pubbl/distr/stampa	Frontiers Media SA, 2016
Descrizione fisica	1 online resource (254 p.)
Collana	Frontiers Research Topics
Soggetti	Neurosciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Sommario/riassunto

Scents can carry a lot of important information about the environment, conspecifics and other species. While some of these scents are positively related, as the odor of food, mating partners, or familiar conspecifics, other scents are associated with negative situations and events, e.g. the occurrence of a predator, an aggressive territorial conspecific or spoiled food. The present research topic is focused on such "scents that matter", i.e., scents that are crucial for the survival of an organism. Since many years, the importance of scents always attracts scientists to investigate how scents affect the behavior of mammals, via which mechanisms scents are perceived and how scents modulate neural circuitries responsible for behavior. We believe that this research topic gives a nice overview on current 'olfactory research.' Many of the contributions are focused on scents with aversive effects, i. e. kairomones or pheromones that warn about potential threats. These studies range from research articles identifying new active odor components of predator odors, describing the induced behavioral changes and the underlying neuroanatomical and neurochemical mechanisms, to review articles summarizing the findings of the last decades on this field. Other articles are focused on the effects of scents in social behaviors or on associative learning. This research topic also represents nicely the current combination of methodological approaches in 'olfactory research': cell biologists, geneticists, behavioral pharmacologists, neuroanatomists, and computational

modelers work effectively together to unravel the mechanisms of how scents matters in humans and animals.