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Nota di contenuto	Front Cover; Molecular Basis of Olfaction; Copyright; Contents; Contributors; Preface; Chapter 1: Mammalian Olfactory Receptors: Molecular Mechanisms of Odorant Detection, 3D-Modeling, and Structure-Activity ...; 1. Mammalian Olfactory Receptors: From Genes to Proteins; 1.1. Genes and pseudogenes; 1.2. OR protein expression; 1.3. Olfactory signal transduction; 2. Olfactory Receptor Activity Regulation: Homodimerization, Binding Cooperativity, and Allostery; 3. Olfactory Receptor 3D Modeling and Use for Virtual Screening; 3.1. Model building; 3.2. Ligand virtual screening 3.3. GPCR inverse agonist, antagonist, and agonist ligands4. Odorant Ligands Structure-Activity Relationships; References; Chapter 2: Olfactory Signaling in Insects; 1. Introduction; 2. Insect Olfactory Receptors; 2.1. Structure; 2.2. Function; 2.3. Regulation; 3. Role of Orco; 4. Final Remarks; Acknowledgments; References; Chapter 3: Advances in the Identification and Characterization of Olfactory

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Sommario/riassunto

The scope of this volume of Progress in Molecular Biology and Translational Science includes the molecular regulation of olfactory processes in vertebrates and insects including detailed discussion of olfactory proteins, signaling cascades and olfactory receptor modeling. In addition, because insect olfaction is an important and emerging field, it is also discussed in the context of key research questions such as disruption of host-finding by insect disease vectors, elucidation of the diverse range of compounds that are detected by insects, and the detection of pheromones by moths. Compreh
