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Nota di contenuto	Preface; Contents; 1 Structure of Neuronal Nicotinic Receptors; Abstract; 1 Introduction; 2 Overall Structure of Nicotinic Subtypes; 2.1 Orthosteric ACh Binding Sites; 2.2 Accessory Subunits; 2.3 Subunit Stoichiometry; 3 Native Subtypes; 3.1 Techniques for Studying Native nAChRs; 3.2 Autoradiographic Studies; 3.3 Biochemical and Pharmacological Studies of Native Subtypes; 3.3.1 Non alpha Bungarotoxin-Sensitive Receptors; 3.3.2 alpha Bungarotoxin-Sensitive Receptors; 4 Conclusions; Acknowledgments; References; 2 Genetics of Smoking Behaviour; Abstract; 1 Introduction 2 Genome-Wide Association Studies3 Phenotype Refinement; 3.1 In Vitro Studies and Animal Models; 3.2 Candidate Gene Follow-up Studies; 3.3 Recall-by-Genotype Studies; 4 New and Emerging Technologies; 5 Conclusions and Future Directions; References; 3 Pharmacogenetics of Nicotine and Associated Smoking Behaviors; Abstract; 1 Introduction; 2 Pharmacogenetics of Nicotine

Pharmacokinetics; 2.1 Genetic Variation in Nicotine Metabolism; 2.1.1 Cytochrome P450 2A6 (CYP2A6); 2.1.2 3HC/COT as a Biomarker of CYP2A6 Enzymatic Activity; 2.1.3 Effect of CYP2A6 Genetic Variation on Smoking Behaviors  
 2.1.4 Acquisition of Smoking Behaviors  
 2.1.5 Cigarette Consumption and Smoking Topography; 2.1.6 Nicotine Dependence; 2.1.7 Cessation and Response to Pharmacotherapies; 2.1.8 Interethnic Variation in CYP2A6 and Smoking Behaviors; 2.1.9 Cytochrome P450 2B6 (CYP2B6); 2.1.10 Effect of CYP2B6 Genetic Variation on Smoking Behaviors; 2.1.11 Cytochrome P450 2A13 (CYP2A13); 2.1.12 Flavin-Containing Monooxygenases (FMOs); 2.1.13 Association of FMO1 and FMO3 Genetic Variation with Nicotine Metabolism and Smoking Behaviors; 2.1.14 UDP-Glucuronyltransferases (UGTs)  
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 2.2 Genetic Variation in the Renal Elimination of Nicotine; 3 Pharmacogenetics of Nicotine's Central Nervous System Targets; 3.1 Genetic Variation in Nicotinic Acetylcholine Receptors; 3.1.1 Acquisition of Smoking Behaviors; 3.1.2 Cigarette Consumption and Smoking Topography; 3.1.3 Nicotine Dependence; 3.1.4 Cessation and Response to Pharmacotherapies; 3.2 Genetic Variation in the Dopaminergic System; 3.2.1 Dopamine Transporters; 3.2.2 Likelihood of Being a Smoker  
 3.2.3 Acquisition of Smoking Behaviors  
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 3.3.3 Serotonin Transporter

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Sommario/riassunto

The primary purpose of this book and its companion volume The Neuropharmacology of Nicotine Dependence is to explore the ways in which recent studies on nicotine and its role in tobacco addiction have opened our eyes to the psychopharmacological properties of this unique and fascinating drug. While the present volume considers the molecular and genetic factors which influence behavioral responses to nicotine and how these may impact on the role of nicotine in tobacco dependence, the book The Neuropharmacology of Nicotine Dependence focuses on the complex neural and psychological mechanisms that mediate nicotine dependence in experimental animal models and their relationship to tobacco addiction in humans. These volumes will provide readers with a contemporary overview of current research on nicotine psychopharmacology and its role in tobacco dependence from leaders in this field of research and will hopefully prove valuable to those who are developing their own research programmes in this important topic. CTBN Vol 23 The Behavioral Genetics of Nicotine and Tobacco The primary purpose of this book and its companion volume The Neuropharmacology of Nicotine Dependence is to explore the ways in which recent studies on nicotine and its role in tobacco addiction have opened our eyes to the psychopharmacological properties of this unique and fascinating drug. While the present volume considers the molecular and genetic factors which influence behavioral responses to nicotine and how these may impact on the role of nicotine in tobacco dependence, the book The Neuropharmacology of Nicotine Dependence focuses on the complex neural and psychological mechanisms that mediate nicotine dependence in experimental animal models and their

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