Contents

Part I Preclinical Neuroscience

Neuroplastic Alterations in the Limbic System Following Cocaine or Alcohol Exposure ................................................................. 3
Garret D. Stuber, F. Woodward Hopf, Kay M. Tye, Billy T. Chen, and Antonello Bonci

Dopamine Signaling in the Nucleus Accumbens of Animals Self-Administering Drugs of Abuse ......................................................... 29
Ingo Willuhn, Matthew J. Wanat, Jeremy J. Clark, and Paul E.M. Phillips

Amygdala Mechanisms of Pavlovian Psychostimulant Conditioning and Relapse ................................................................. 73
Deanne M. Buffalari and Ronald E. See

Prefrontal Cortical Regulation of Drug Seeking in Animal Models of Drug Relapse ................................................................. 101
Heather C. Lasseter, Xiaohu Xie, Donna R. Ramirez, and Rita A. Fuchs

Neural Substrates of Psychostimulant Withdrawal-Induced Anhedonia .................................................................................. 119
Manoranjan S. D’Souza and Athina Markou

Sensitization Processes in Drug Addiction ............................................. 179
Louk J.M.J. Vanderschuren and R. Christopher Pierce

Part II Clinical Neuroscience

Imaging Receptor Changes in Human Drug Abusers .......................... 199
Kelly P. Cosgrove
Imaging Neurotransmitter Release by Drugs of Abuse .................. 219
Diana Martinez and Rajesh Narendran

Imaging Cognitive Deficits in Drug Abuse ............................... 247
Thomas Lundqvist

Neural Markers of Genetic Vulnerability to Drug Addiction .......... 277
Daniel J. Müller, Olga Likhodi, and Andreas Heinz

The Role of Executive Control in Human Drug Addiction ............ 301
Robert Hester, Dan I. Lubman, and Murat Yücel

The Behavioral Economics of Drug Dependence: Towards the Consilience of Economics and Behavioral Neuroscience .......... 319

Novel Pharmacological Approaches to Drug Abuse Treatment ....... 343
Ellen Edens, Alfredo Massa and Ismene Petrakis

Index .................................................................................. 387
Behavioral Neuroscience of Drug Addiction
Self, D.W.; Staley Gottschalk, J.K. (Eds.)
2010, XIV, 392 p. 26 illus., 5 illus. in color., Hardcover
ISBN: 978-3-642-03000-0