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Titolo	Computational Psychiatry : A Systems Biology Approach to the Epigenetics of Mental Disorders / / by Rodrick Wallace
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ISBN	3-319-53910-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 236 p. 31 illus.)
Disciplina	570
Soggetti	Systems biology Human genetics Psychiatry Systems Biology Human Genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Consciousness, Crosstalk, and the Mereological Fallacy -- A Cognitive Paradigm for Gene Expression -- Western Atomism and its Culture-Bound Syndromes -- Environmental Induction of Neurodevelopmental Disorders -- Sleep, Psychopathology and Culture -- Embodied cognition and its disorders -- Tools for the Future: Hidden Symmetries -- Psychopathologies of automata I: autonomous vehicle systems -- Psychopathologies of automata II: autonomous weapons and centaur systems -- The dynamics of environmental insult -- Social psychopathology: military doctrine and the madness of crowds -- Mathematical Appendix -- Index.
Sommario/riassunto	This book explores mental disorders from a uniquely evolutionary perspective. Although there have been many attempts to mathematically model neural processes and, to some extent, their dysfunction, there is very little literature that models mental function within a sociocultural, socioeconomic, and environmental context. Addressing this gap in the extant literature, this book explores essential aspects of mental disorders, recognizing the ubiquitous role played by the exaptation of crosstalk between cognitive modules at

many different scales and levels of organization, the missing heritability of complex diseases, and cultural epigenetics. Further, it introduces readers to valuable control theory tools that permit the exploration of the environmental induction of neurodevelopmental disorders, as well as the study of the synergism between culture, psychopathology and sleep disorders, offering a distinctively unique resource.
