

1. Record Nr.	UNINA9910830131203321
Titolo	Developmental neurotoxicology research [[electronic resource]] : principles, models, techniques, strategies, and mechanisms // [edited by] Cheng Wang, William Slikker Jr
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2011
ISBN	0-470-92274-5 1-282-90483-3 9786612904837 0-470-91705-9 0-470-91706-7
Descrizione fisica	1 online resource (666 p.)
Altri autori (Persone)	WangCheng <1954-> SlikkerWilliam
Disciplina	616.8/0471 616.80471
Soggetti	Neurotoxicology Developmental toxicology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	DEVELOPMENTALNEUROTOXICOLOGYRESEARCH; CONTENTS; PREFACE; CONTRIBUTORS; I MODELS, APPROACHES, AND CHALLENGES IN NEUROTOXICITY RESEARCH DURING DEVELOPMENT; 1 APPROACHES AND MODELS FOR EVALUATING THE TOXIC EFFECTS OF ANESTHETICS IN THE DEVELOPING NERVOUS SYSTEM; 2 SYSTEMS BIOLOGY APPROACHES TO NEUROTOXICITY STUDIES DURING DEVELOPMENT; 3 BEHAVIORAL APPROACHES FOR ASSESSING NERVOUS SYSTEM FUNCTION DURING DEVELOPMENT IN ANIMAL MODELS; 4 APPLICATIONS OF UNBIASED STEREOLOGY TO NEURODEVELOPMENTAL TOXICOLOGY; II EFFECTS OF ANESTHETICS AND THEIR POTENTIAL NEUROTOXICITY DURING DEVELOPMENT 5 NEUROTOXIC EFFECTS OF ANESTHETICS AND POTENTIAL PROTECTIVE AGENTS6 PERINATAL RHESUS MONKEY MODELS AND ANESTHETIC-INDUCED NEURONAL CELL DEATH; 7 EFFECTS OF GASEOUS ANESTHETIC COMBINATIONS DURING DEVELOPMENT; 8 PERINATAL ANESTHETIC

ADMINISTRATION AND SHORT LONG-TERM BEHAVIORAL DEFICITS; III THE DEVELOPMENTAL BASIS OF ADOLESCENT OR ADULT DISEASE; 9 DEVELOPMENTAL LEAD EXPOSURE, EPIGENETICS AND LATE ONSET ALZHEIMER'S DISEASE; 10 DEVELOPMENTAL TRAJECTORIES OF AUTISM AND ENVIRONMENTAL EXPOSURES-WHAT WE KNOW AND WHERE WE NEED TO GO; 11 ACTIONS OF MANGANESE ON PUBERTAL DEVELOPMENT
12 EXPOSURE OF THE DEVELOPING BRAIN TO POLYCHLORINATED BIPHENYLS INFLUENCES THE SUSCEPTIBILITY OF THE ADULT BRAIN TO STRESS
13 A NEURODEVELOPMENTAL ORIGIN FOR PAKINSON'S DISEASE: A LINK TO THE FETAL BASIS FOR ADULT DISEASE HYPOTHESIS; 14 GENETIC AND ENVIRONMENTAL FACTORS IN ATTENTION-DEFICIT HYPERACTIVITY DISORDER; IV RISK ASSESSMENT OF METHYL MERCURY AND ITS EFFECTS ON NEURODEVELOPMENT; 15 FISH NUTRIENTS AND METHYLMERCURY: A VIEW FROM THE LABORATORY
16 NEURODEVELOPMENTAL EFFECTS OF MATERNAL NUTRITION STATUS AND EXPOSURE TO METHYL MERCURY FROM EATING FISH DURING PREGNANCY: EVIDENCE FROM THE SEYCHELLES CHILD DEVELOPMENT STUDY
17 METHYLMERCURY NEUROTOXICOLOGY: FROM RARE POISONINGS TO SILENT PANDEMIC; 18 OXIDATIVE STRESS AND METHYLMERCURY-INDUCED NEUROTOXICITY; 19 LEARNING DEFICITS AND DEPRESSION-LIKE BEHAVIORS ASSOCIATED WITH DEVELOPMENTAL METHYLMERCURY EXPOSURES; 20 METHYLMERCURY EFFECTS ON NEURAL DEVELOPMENTAL SIGNALING PATHWAYS; V AUTISM SPECTRUM DISORDERS; 21 NEURODEVELOPMENTAL TOXICOLOGY AND AUTISM SPECTRUM DISORDERS
22 REDOX IMBALANCE AND THE METABOLIC PATHOLOGY OF AUTISM
23 NEUROINFLAMMATION AND AUTISM; 24 AUTISM, PERIPHERAL IMMUNITY, AND POLYBROMINATED DIPHENYL ETHERS; 25 AN EMERGING GENE-ENVIRONMENT INTERACTION MODEL: AUTISM SPECTRUM DISORDER PHENOTYPES RESULTING FROM EXPOSURE TO ENVIRONMENTAL CONTAMINANTS DURING GESTATION; VI STRATEGIES AND PROGRESS IN EPILEPSY RESEARCH; 26 NEONATAL SEIZURES; 27 EXPERIMENTAL MODELS OF EPILEPTOGENESIS; 28 EFFECT OF SEIZURES ON THE DEVELOPING BRAIN: LESSONS FROM THE LABORATORY; INDEX

Sommario/riassunto

This book describes how systems biology, pharmacogenomic and behavioral approaches, as applied to neurodevelopmental toxicology, provide a structure to arrange information in a biological model. Authors review and discuss approaches that can be used as effective tools to dissect mechanisms underlying pharmacological and toxicological phenomena associated with the exposure to drugs or environmental toxicants during development. This book presents cross-cutting research tools and animal models, along with applications to the studies associated with potential anesthetic-induced developmental neur
