

ROOTS OF MENTAL ILLNESS IN CHILDREN

Editors

JEAN A. KING, CRAIG F. FERRIS, AND ISRAEL I. LEDERHENDLER

This volume is the result of a conference entitled **Roots of Mental Illness in Children** sponsored by the New York Academy of Sciences and the National Institute of Mental Health held on March 15–17, 2003 in New York, NY.

CONTENTS

Preface. <i>By</i> JEAN A. KING	ix
Introduction: Behavioral Neuroscience and Childhood Mental Illness. <i>By</i> ISRAEL I. LEDERHENDLER	1
Categories, Dimensions, and Mental Health of Children and Adolescents: Keynote Address. <i>By</i> MICHAEL RUTTER	11

Part I. Parent–Child Interactions

Attachment Relationship Experiences and Childhood Psychopathology. <i>By</i> CHARLES H. ZEANAH, ANGELA KEYES, AND LISA SETTLES	22
Social Engagement and Attachment: A Phylogenetic Perspective. <i>By</i> STEPHEN W. PORGES	31

Part II. Parent–Child Interactions: Separation

Can We Develop a Neurobiological Model of Human Social–Emotional Development? Integrative Thoughts on the Effects of Separation on Parent–Child Interactions. <i>By</i> CHARLES A. NELSON	48
Family and Community Factors that Predict Internalizing and Externalizing Symptoms in Low-Income, African-American Children: A Preliminary Report. <i>By</i> NADINE J. KASLOW, SHERYL HERON, DEBRA KIM ROBERTS, MARTIE THOMPSON, OMAR GUESSOUS, AND CLAUDIA JONES	55

Part III. Social Interactions: Conflict

- Using an Animal Model to Assess the Long-Term Behavioral and Biological Consequences of Adolescent Abuse and Exposure to Alcohol.
By CRAIG F. FERRIS 69
- Aggressive Behavior in Abused Children. *By* DANIEL F. CONNOR, LEONARD A. DOERFLER, ADAM M. VOLUNGIS, RONALD J. STEINGARD, AND RICHARD H. MELLONI, JR. 79

Part IV. Social Interactions: Risk Assessment

- The Amygdala and Development of the Social Brain. *By* DAVID SKUSE, JOHN MORRIS, AND KATE LAWRENCE 91
- Experience-Dependent Affective Learning and Risk for Psychopathology in Children. *By* SETH D. POLLAK 102

Part V. Learned Fear and Anxiety: The Sense of Safety

- Applying Learning Principles to the Treatment of Post-Trauma Reactions.
By BARBARA OLASOV ROTHBAUM AND MICHAEL DAVIS 112
- Developing a Sense of Safety: The Neurobiology of Neonatal Attachment.
By REGINA M. SULLIVAN 122
- Gene-Environment Interactions and the Neurobiology of Social Conflict.
By STEPHEN J. SUOMI 132
- The Policy Context for Child and Adolescent Mental Health Services: Implications for Systems Reform and Basic Science Development.
By KIMBERLY HOAGWOOD 140

Part VI. Mood Regulation: Impulsivity

- Impulsivity, Emotion Regulation, and Developmental Psychopathology: Specificity Versus Generality of Linkages. *By* STEPHEN P. HINSHAW . . . 149
- Neural Substrates Underlying Impulsivity. *By* JEAN A. KING, JEFFREY TENNEY, VICTORIA ROSSI, LAURALEA COLAMUSSI, AND STACY BURDICK. 160
- Response Inhibition and Disruptive Behaviors: Toward a Multiprocess Conception of Etiological Heterogeneity for ADHD Combined Type and Conduct Disorder Early-Onset Type. *By* JOEL T. NIGG 170

Part VII. Mood Regulation: Individual Differences

- The Development of Affect Regulation: Bringing Together Basic and Clinical Perspectives. *By* RONALD E. DAHL 183
- Nonhuman Primate Models to Study Anxiety Emotion Regulation, and Psychopathology. *By* NED H. KALIN AND STEVEN E. SHELTON 189
- Irritability in Pediatric Mania and Other Childhood Psychopathology. *By* ELLEN LEIBENLUFT, R. JAMES R. BLAIR, DENNIS S. CHARNEY, AND DANIEL S. PINE 201

**Part VIII. Mental Illness in Children and Adolescents:
Challenges for Progress**

Brain Imaging Studies of the Anatomical and Functional Consequences of Preterm Birth for Human Brain Development. <i>By</i> BRADLEY S. PETERSON	219
Integrating Neuroscience and Psychological Approaches in the Study of Early Experiences. <i>By</i> MEGAN R. GUNNAR	238
The Serotonin Transporter Gene in Aggressive Children with and without ADHD and Nonaggressive Matched Controls. <i>By</i> JOSEPH H. BEITCHMAN, KRISTEN M. DAVIDGE, JAMES L. KENNEDY, LESLIE ATKINSON, VIVIAN LEE, SOLOMON SHAPIRO, AND LORI DOUGLAS	248

Part IX: Poster Papers

Effortful Control, Attention, and Aggressive Behavior in Preschoolers at Risk for Conduct Problems. <i>By</i> TRACY A. DENNIS AND LAURIE MILLER BROTMAN	252
Functional Neuroimaging of Social Cognition in Pervasive Developmental Disorders: A Brief Review. <i>By</i> ADRIANA DI MARTINO AND F. XAVIER CASTELLANOS	256
Hallucinations in Nonpsychotic Children: Findings from a Psychiatric Emergency Service. <i>By</i> GAIL A. EDELSON, HARRIS RABINOVICH, AND RUBEN PORTNOY	261
Subanalysis of the Location of White Matter Hyperintensities and Their Association with Suicidality in Children and Youth. <i>By</i> STEFAN EHRLICH, GIL G. NOAM, IN KYOON LYOO, BAE J. KWON, MEGAN A. CLARK, AND PERRY F. RENSHAW	265
Obstetric Complications Correlate with Neurobehavioral and Brain Structural Alterations in Young Relatives at Risk for Schizophrenia. <i>By</i> ANDREW R. GILBERT, DEBRA M. MONTROSE, SARAH D. SAHNI, VAIBHAV A. DIWADKAR, AND MATCHERI S. KESHAVAN	269
Longitudinal Assessment of Callous/Impulsive Traits, Substance Abuse, and Symptoms of Depression in Adolescents: A Latent Variable Approach. <i>By</i> CRAIG S. NEUMANN, MICHAEL VITACCO, ANGELA ROBERTSON, AND KENNETH SEWELL	276
Sex Differences and Hormonal Effects in a Model of Preterm Infant Brain Injury. <i>By</i> JOSEPH L. NUÑEZ AND MARGARET M. MCCARTHY	281
Coping Strategies Moderate the Relation of Hypothalamus–Pituitary–Adrenal Axis Reactivity to Self-Injurious Behavior. <i>By</i> SALLY I. POWERS AND ELIZA T. MCARDLE	285
Prenatal Nicotine Exposure and Behavior. <i>By</i> V. ROSSI, T. MESSENGER, D. PETERS, C.F. FERRIS, AND J. KING	289
Familial Psychiatric Disorders in Child DSM-IV ADHD: Moderation by Child Gender. <i>By</i> JULIEANN STAWICKI AND JOEL T. NIGG	293
Reorganization of Unresolved Childhood Traumatic Memories Following Exposure Therapy. <i>By</i> K. CHASE STOVALL-MCCLOUGH AND MARYLENE CLOITRE	297

Ineffective Parenting: A Precursor to Psychopathic Traits and Delinquency in Hispanic Females. <i>By</i> MICHAEL J. VITACCO, CRAIG S. NEUMANN, VINCENT RAMOS, AND MARY K. ROBERTS	300
Mother Lowers Glucocorticoid Levels of Prewaning Rats After Acute Threat. <i>By</i> CHRISTOPH P. WIEDENMAYER, ANA M. MAGARINOS, BRUCE S. MCEWEN, AND GORDON A. BARR	304
Early Deprivation Alters the Vocalization Behavior of Neonates Directing Maternal Attention in a Rat Model of Child Neglect. <i>By</i> BETTY ZIMMERBERG, JU H. KIM, ABIGAIL N. DAVIDSON, AND ABIGAIL J. ROSENTHAL	308
Index of Contributors	315

Financial assistance was received from:

Major Funders

- JANSSEN PHARMACEUTICA INC.
- NATIONAL INSTITUTE OF MENTAL HEALTH—NATIONAL INSTITUTES OF HEALTH
 - DIVISION OF MENTAL DISORDERS, BEHAVIORAL RESEARCH AND AIDS
 - DIVISION OF NEUROSCIENCE AND BASIC BEHAVIORAL SCIENCE

Contributors

- NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE—NATIONAL INSTITUTES OF HEALTH

The New York Academy of Sciences believes it has a responsibility to provide an open forum for discussion of scientific questions. The positions taken by the participants in the reported conferences are their own and not necessarily those of the Academy. The Academy has no intent to influence legislation by providing such forums.