

Contents

1 Introduction to Neuropathology	1
Manuel F. Casanova, Paul H. Patterson, and Eric London	
2 The Neuropathology of Autism	27
Manuel F. Casanova and Jane Pickett	
3 QEEG-Guided Neurofeedback for Autism: Clinical Observations and Outcomes	45
Michael Linden and Jay Gunkelman	
4 Event-Related Potential Studies of Cognitive Processing Abnormalities in Autism	61
Estate M. Sokhadze, Joshua Baruth, Allan Tasman, and Manuel F. Casanova	
5 Evoked and Induced Gamma-Frequency Oscillations in Autism	87
Manuel F. Casanova, Joshua Baruth, Ayman S. El-Baz, Guela E. Sokhadze, Marie Hensley, and Estate M. Sokhadze	
6 Neurofeedback for Autistic Disorders: Emerging Empirical Evidence	107
Robert Coben	
7 Structural Imaging in Autism	135
Brandon A. Zielinski, Molly D. Prigge, Jared A. Nielsen, and Janet E. Lainhart	
8 Diffusion Tensor Magnetic Resonance Imaging in Autism	179
Brittany G. Travers and Andrew L. Alexander	
9 Spectroscopic Brain Imaging in Autism	231
Janet E. Lainhart, Jason Cooperrider, and June S. Taylor	

10 Functional MRI in Autism 289
Jeffrey S. Anderson, Michael A. Ferguson,
and Jared A. Nielsen

11 Functional Connectivity MRI in Autism..... 325
Jeffrey S. Anderson

12 EEG Analyses in the Assessment of Autistic Disorders..... 349
Robert Coben, Robert J. Chabot, and Laurence Hirshberg

**13 Behavior Imaging®’s Assessment Technology:
A Mobile Infrastructure to Transform Autism
Diagnosis and Treatment**..... 371
Ron Oberleitner, Gregory Abowd,
and Jasjit S. Suri

About the Editors..... 381

Index..... 383



<http://www.springer.com/978-1-4614-6842-4>

Imaging the Brain in Autism

Casanova, M.F.; El-Baz, A.S.; Suri, J. (Eds.)

2013, XIV, 387 p., Hardcover

ISBN: 978-1-4614-6842-4