

Contents

Part I Introduction to Genomics

1. Key Concepts in Human Genomics and Epidemiology 3
Offie P. Soldin and Christopher A. Loffredo
2. Psychological Genetics: Understanding the Nature
of Psychological Differences Through Etiology 33
Kristian E. Markon

Part II Cross-Cutting Issues in Children and Families

3. Understanding Gene, Environment, and Gene $\times$
Environment Interaction Effects: The Example
of Childhood Externalizing Disorders 59
Hilah Evrony, Jennifer Ulbricht, and Jenae M. Neiderhiser
4. Process in Genetic Counseling: Considerations
for Children and Their Families 87
Julianne M. O'Daniel and Allyn McConkie-Rosell
5. Genomics and the Family: Integrative Frameworks 109
Marcia Van Riper
6. Potential Impact of Genomic Information on Childhood
Sibling Relationships 141
Joanna Fanos, Lori Wiener, and Tara Brennan
7. Family Communication of Genomic Information 163
Brenda J. Wilson and Holly Etchegary
8. Conveying Genetic Risk to Teenagers 191
Isaac M. Lipkus

Part III Genes, Behavior, and Health

9. Prenatal Screening and Diagnosis 221
Kelly E. Ormond
10. Single Gene Disease Risk 241
Tricia See and Cynthia J. Tift
11. Hereditary Cancer Risk 267
Jennifer E. Axilbund and Beth N. Peshkin
12. Type 1 Diabetes Risk 293
Suzanne Bennett Johnson
13. Cardiovascular Disease Risk 313
Suma Potiny and Sarah Clauss
14. Obesity Risk 329
Saskia C. Sanderson and Myles S. Faith
15. Tobacco and Alcohol Use Behaviors 345
Nicole R. Hoft, Joseph T. Sakai, and Marissa A. Ehringer
16. Childhood Neuropsychiatric Risk 369
Josephine Elia, Karin Borgmann-Winter, and Dorothy Grice
17. Genomic Risk Information for Common Health
Conditions: Maximizing Kinship-Based Health Promotion . . . 407
Laura M. Koehly and Colleen M. McBride

Part IV Emerging Issues

18. Pediatric Pharmacogenomics 437
Ning Wang, Dennis Drotar, and Gurjit K. Khurana Hershey
19. Informed Consent and the Protection of Human
Subjects in Genomic Research with Children and Families . . 457
John G. Twomey
20. Ethical, Legal and Social Issues in the Genetic Testing
of Minors 485
Bernice S. Elger
21. Guidelines and Policies on Genetic Testing in Children
and Families 523
*Donald W. Hadley, Anne D. Letocha Ersig, and
M.K. Holohan Quattrocchi*

CONTENTS

xix

22.	Training, Practice, and Collaboration: New Opportunities for Pediatric Psychology and Genomic Medicine	559
	<i>Andrea Farkas Patenaude</i>	
23.	Public Health Genomics	577
	<i>Suzanne C. O'Neill</i>	
	Subject Index	595