
Contents

Preface	v
Contributors	xi
1 What Would Thomas Henry Huxley Have Made of Prion Diseases? Rosalind M. Ridley	1
2 Prion Protein as Copper-Binding Protein at the Synapse Hans A. Kretzschmar, Tobias Tings, Axel Madlung, Armin Giese, and Jochen Herms	17
3 A Function for the Prion Protein? David R. Brown and Ian M. Jones	31
4 Prion Protein Peptide: <i>Agents of Death for Neurons</i> David R. Brown	51
5 Characterization of Bovine Spongiform Encephalopathy and Scrapie Strains/Isolates by Immunochemical Analysis of PrP ^{Sc} Martin H. Groschup, Frauke Junghans, Martin Eiden, and Thorsten Kuczius	71
6 Differential Targeting of Neurons by Prion Strains Stephen J. DeArmond	85
7 Transgenic Studies of Prion Diseases Glenn C. Telling	111
8 Prions: From Neurografts to Neuroinvasion Markus Glatzel, Sebastian Brandner, Michael A. Klein, and Adriano Aguzzi	129
9 Cellular and Transgenic Models of Familial Prion Diseases David A. Harris, Roberto Chiesa, Antonio Migheli, Pedro Piccardo, and Bernardino Ghetti	149
10 Central Nervous System Inflammation and Prion Disease Pathogenesis Samar Betmouni and V. Hugh Perry	163
11 The Electroneuropathology of Prion Disease J. Richard Greene	181

12	Transmissible Spongiform Encephalopathy Neurobiology and Ultrastructure Suggests Extracellular PrP ^{Sc} Conversion Consistent with Classical Amyloidosis Martin Jeffrey and Jan R. Fraser	199
13	Conformation as Therapeutic Target in the Prionoses and Other Neurodegenerative Conditions Thomas Wisniewski, Einar M. Sigurdsson, Pierre Aucouturier, and Blas Frangione	223
14	Prions of Yeast: <i>From Cytoplasmic Genes to Heritable Amyloidosis</i> Reed B. Wickner, Herman K. Edskes, Kimberly L. Taylor, Marie-Lise Maddelein, Hiromitsu Moriyama, and B. Tibor Roberts	237
	Index	269