

Table of Contents

- Chapter 1: Introduction: The Hippocampal Formation - the Editors
- Chapter 2: Historical Perspective - the Editors
- Chapter 3: Neuroanatomy - David Amaral, Pierre Lavenex, and Ricardo Insausti
- Chapter 4: Development of the Hippocampus - Pierre Lavenex, David Amaral, Pamela Banta Lavenex, Francois Guillemot, Ricardo Insausti, and Noelia Urban
- Chapter 5: Cell Properties - Nelson Spruston, Rebecca Piskorowski, Viven Chevalleyre, Mark D. Eyre, Chris McBain, and Marlene Bartos
- Chapter 6: Synaptic Function - Dimitri Kullman and Kirill Volynski
- Chapter 7: Local Circuits - Andres D. Grosmark, Aaron D. Milstein, Attila Losonczy, and Ivan Soltesz
- Chapter 8: Molecular Mechanisms of Synaptic Function in the Hippocampus - Paul G Donlin-Asp, Anne-Sophie Hafner, and Erin M Schuman
- Chapter 9: Structural Plasticity - Rusty Gage, Matthew Shtrahman, Sarah Parylak, and Tomohisa Toda
- Chapter 10: Synaptic Plasticity in the Hippocampus - Tim Bliss, Graham Collingridge, Sam Cooke, John Georgiou, and Richard Morris
- Chapter 11: Hippocampal Physiology - Julia Krupic and John O'Keefe
- Chapter 12: The Entorhinal Cortex - Benjamin R. Kanter, Edvard I. Moser, and Menno P. Witter
- Chapter 13: Functions of the Human Hippocampus - Daniel N. Barry and Eleanor A. Maguire
- Chapter 14: Theories of Hippocampal Function - Sam Mackenzie, Francesco Gobbo, and Richard Morris
- Chapter 15: Aging and the Hippocampus - Sara N. Burke and Carol Barnes
- Chapter 16: Computational Models of Hippocampal Cognitive Function - Daniel Bush and Neil Burgess
- Chapter 17: Stress and the Hippocampus - Bruce McEwen with Sumantra Chatterji
- Chapter 18: Mesial Temporal Lobe Epilepsy - Matthew C. Walker, Maria Thom, and Umesh Vivekananda
- Chapter 19: Psychosis and the Hippocampus: Fundamental Alterations in Hippocampal Function - Carol Tamminga, Daniel Scott, and Elena I. Ivleva
- Chapter 20: Alzheimer Disease - Dennis Chan, Tara Spire-Jones, Frank Provenzano, Lizzie Glennon, and Karen Duff