A fresh take on contemporary brain science, this book presents neuroscience the scientific study of brain, mind, and behavior—in easy-to-understand ways with a focus on concepts of interest to all science readers. Rigorous and detailed enough to use as a textbook in a university or community college class, it is at the same time meant for any and all readers, clinicians and non-clinicians alike, interested in learning about the foundations of contemporary brain science. From molecules and cells to mind and consciousness, the known and the mysterious are presented in the context of the history of modern biology with an eye toward better appreciating the beauty and growing public presence of neuroscience.

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"This book is a gem. It is a lucid survey of the whole majestic sweep of contemporary neuroscience, written for the non-medical reader. At the same time, it is sprinkled liberally with original insights that will provide much food for thought even for specialists. It will also make an excellent textbook for any introductory course in neuroscience."

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"Be prepared to be awe struck and endlessly inspired by reading this tour of the human mind and brain with legendary teacher and neuroscientist David Presti. As you learn about the great discoveries of neuroscience—the chemicals, genes, neurons, and brain structures that make us up—you will find answers to timeless questions. What are the origins of life? Why do humans take drugs? What are the emotions? What is consciousness? Who are we? There could be no better guidebook than this endlessly fascinating and important book."

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"A true 'brain-mind odyssey,' a journey that does not overwhelm with facts and experimental results, but rather takes a first-principles approach to build a picture of brain function in a truly interdisciplinary manner. Presti draws on his vast knowledge of the biological and cognitive sciences, blended together with nuggets of history and anthropology, to reveal and embrace the mysteries of the mind. Presti's lectures are legendary among Berkeley undergraduates; in *Foundational Concepts in Neuroscience*, he provides a naturalist's approach to the neurosciences, synthesizing these teachings into an accessible and engaging text. A *tour de force*."

-RICH IVRY, co-author of Cognitive Neuroscience: The Biology of the Mind



David E. Presti teaches neurobiology, psychology, and cognitive science at the University of California in Berkeley; worked for more than a decade in the clinical treatment of addiction at the Veterans Administration Medical Center in San Francisco; and teaches neuroscience to Tibetan monastics in India. He has doctorates in molecular biology and biophysics from Caltech, and in clinical psychology from the University of Oregon.

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A BRAIN-MIND ODYSSEY

DAVID E. PRESTI