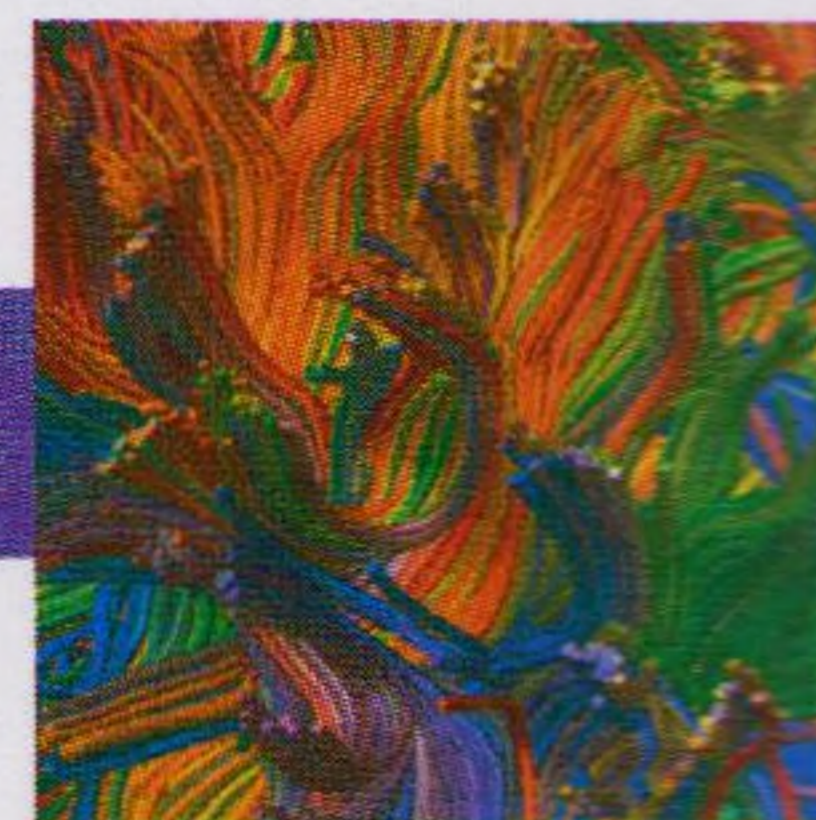


CONTENTS IN BRIEF



<i>Preface</i>	vii
<i>User's Guide</i>	xiii
<i>Acknowledgments</i>	xvii
<i>Path of Discovery Authors</i>	xix
<i>Images</i>	xxi

PART ONE Foundations 1

CHAPTER ONE	Neuroscience: Past, Present, and Future	3
CHAPTER TWO	Neurons and Glia	23
CHAPTER THREE	The Neuronal Membrane at Rest	55
CHAPTER FOUR	The Action Potential	81
CHAPTER FIVE	Synaptic Transmission	109
CHAPTER SIX	Neurotransmitter Systems	143
CHAPTER SEVEN	The Structure of the Nervous System	179
Appendix:	An Illustrated Guide to Human Neuroanatomy	219

PART TWO Sensory and Motor Systems 263

CHAPTER EIGHT	The Chemical Senses	265
CHAPTER NINE	The Eye	293
CHAPTER TEN	The Central Visual System	331
CHAPTER ELEVEN	The Auditory and Vestibular Systems	369
CHAPTER TWELVE	The Somatic Sensory System	415
CHAPTER THIRTEEN	Spinal Control of Movement	453
CHAPTER FOURTEEN	Brain Control of Movement	483

PART THREE The Brain and Behavior 519

CHAPTER FIFTEEN	Chemical Control of the Brain and Behavior	521
CHAPTER SIXTEEN	Motivation	551
CHAPTER SEVENTEEN	Sex and the Brain	579
CHAPTER EIGHTEEN	Brain Mechanisms of Emotion	615
CHAPTER NINETEEN	Brain Rhythms and Sleep	645
CHAPTER TWENTY	Language	685
CHAPTER TWENTY-ONE	The Resting Brain, Attention, and Consciousness	719
CHAPTER TWENTY-TWO	Mental Illness	751

PART FOUR The Changing Brain 781

CHAPTER TWENTY-THREE	Wiring the Brain	783
CHAPTER TWENTY-FOUR	Memory Systems	823
CHAPTER TWENTY-FIVE	Molecular Mechanisms of Learning and Memory	865

<i>Glossary</i>	901
<i>References and Resources</i>	925
<i>Index</i>	953