CONTENTS AND REPORTED THE PROPERTY OF THE PROP

1 The Electric Living Fabric 3

The Child with Half a Brain • Life's Other Secret • If You're
Missing the Tool, Create It • An Ever-Changing System

2 Just Add World 17

How to Grow a Good Brain • Experience Necessary • Nature's Great Gamble

3 The Inside Mirrors the Outside 26

The Case of the Silver Spring Monkeys • The Afterlife of Lord Horatio Nelson's Right Arm • Timing Is Everything • Colonization Is a Full-Time Business • The More the Better • Blindingly Fast • What Does Dreaming Have to Do with the Rotation of the Planet? • As Outside, So Inside

4 Wrapping Around the Inputs 51

The Planet-Winning Technology of the Potato Head • Sensory
Substitution • The One-Trick Pony • Eye Tunes • Good
Vibrations • Enhancing the Peripherals • Conjuring a New
Sensorium • Imagining a New Color • Are You Ready for
a New Sensation?

5 How to Get a Better Body 109

Will the Real Doc Ock Please Raise His Hands? • No Standard Blueprints • Motor Babbling • The Motor Cortex, Marshmallows, and the Moon • Self-Control • Toys Are Us • One Brain, Infinite Body Plans

6 Why Mattering Matters 139

The Motor Cortices of Perlman Versus Ashkenazy • Fashioning the Landscape • Dogged • Allowing the Real Estate to Change • The Brain of a Digital Native

7 Why Love Knows Not Its Own Depth Until the Hour of Separation 159

A Horse in the River • Making Invisible the Expected • The Difference Between What You Thought Would Happen and What Actually Happened • Going Toward the Light. Or Sugar. Or Data. • Adjusting to Expect the Unexpected

8 Balancing on the Edge of Change 174

When Territory Disappears • How to Spread Drug Dealers
Evenly • How Neurons Expand Their Social Network • The
Benefits of a Good Death • Is Cancer an Expression of Plasticity
Gone Awry? • Saving the Brain Forest

9 Why Is It Harder to Teach Old Dogs New Tricks? 192

Born as Many • The Sensitive Period • Doors Close at Different Rates • Still Changing After All These Years

10 Remember When 207

Talking to Your Future Self • The Enemy of Memory Is Not Time; It's Other Memories • Parts of the Brain Teach Other Parts • Beyond

Synapses · Daisy-Chaining a Range of Timescales · Many Kinds of

Memory · Modified by History

- 11 The Wolf and the Mars Rover 232
- 12 Finding Ötzi's Long-Lost Love 241

We Have Met the Shape-Shifters, and They Are Us

Acknowledgments 247

Notes 249

Further Reading 287

Index 299