## **Table of Contents**

- 1 The Whale and the Virus: How Scientists Study Evolution 1
- 2 From Natural Philosophy to Darwin: A Brief History of Evolutionary Ideas 28
- 3 What the Rocks Say: How Geology and Paleontology Reveal the History of Life 52
- 4 The Tree of Life: How Biologists Use Phylogeny to Reconstruct the Deep Past
- 5 Raw Material: Heritable Variation Among Individuals 140
- 6 The Ways of Change: Drift and Selection 176
- 7 Beyond Alleles: Quantitative Genetics and the Evolution of Phenotypes 226
- 8 The History in Our Genes 264
- 9 From Genes to Traits: The Evolution of Genetic Networks and Development 308
- 10 Natural Selection: Empirical Studies in the Wild 352
- 11 Sex: Causes and Consequences 390
- 12 After Conception: The Evolution of Life History and Parental Care 434
- 13 The Origin of Species 466
- 14 Macroevolution: The Long Run 508
- 15 Intimate Partnerships: How Species Adapt to Each Other 548
- 16 Brains and Behavior 588
- 17 Human Evolution: A New Kind of Ape 632
- 18 Evolutionary Medicine 684