BLACKWELL COMPANIONS TO ANTHROPOLOGY

A Companion to Biological Anthropology

"Clark Larsen has created a comprehensive sourcebook covering all facets of contemporary biological anthropology. This is a volume that will be an indispensable reference for researchers, teachers, and student at all levels."

Tim D. White, University of California, Berkeley

"Clark Larsen's *A Companion to Biological Anthropology* has provided a literal feast for the anthropology student interested in the adaptation and evolution of our species. The contributions in the book are a wonderful addition to any student's academic tool kit."

George Armelagos, Emory University





List	t of Illustrations	X
List	t of Tables	xvi
Not	tes on Contributors	xvii
Ack	knowledgments	XXV
Intr	roduction	1
Par	rt I History	11
	History of Biological Anthropology Michael A. Little and Robert W. Sussman	
Par	et II The Present and the Living	39
	Evolution: What It Means and How We Know Kenneth M. Weiss and Anne V. Buchanan	41
	Systematics, Taxonomy, and Phylogenetics: Ordering Life, Past and Present Bernard A. Wood	56
	The Study of Human Population Genetics John H. Relethford	74
	Human Molecular Genetics: The DNA Revolution and Variation Dennis H. O'Rourke	88
	Deconstructing Race: Racial Thinking, Geographic Variation, and Implications for Biological Anthropology Rachel Caspari	104

CONTENTS	
Growth, Development, Senescence, and Aging: A Life History Perspective Douglas E. Crews and Barry Bogin	124
Climate-Related Morphological Variation and Physiological Adaptations in <i>Homo sapiens</i> Gary D. James	153
Emerging Themes in Anthropology and Epidemiology: Geographic Spread, Evolving Pathogens, and Syndemics Lisa Sattenspiel and D. Ann Herring	167
Demographic Estimation: Indirect Techniques for Anthropological Populations Timothy B. Gage	179
Nutrition, Health, and Function Darna L. Dufour	194
Ongoing Evolution in Humans Lorena Madrigal and Jessica Willoughby	207
Primates Defined W. Scott McGraw	222
Primate Behavior and Sociality Karen B. Strier	243
Evolution of the Brain, Cognition, and Speech Dean Falk	258
Part III The Past and the Dead	
Primate Origins: The Early Cenozoic Fossil Record Gregg F. Gunnell and Mary T. Silcox	275
Catarrhine Cousins: The Origin and Evolution of Monkeys and Apes of the Old World David R. Begun	295
G. Philip Rightmine	341
Species, Populations, and Assimilation in Later Human Evolution Fred H Smith	357
Bioarchaeology: Health, Lifestyle, and Society in Recent Human Evolution Clark Spencer Larger and Phillip I. Walker	379
	Growth, Development, Senescence, and Aging: A Life History Perspective Douglas E. Crews and Barry Bogin Climate-Related Morphological Variation and Physiological Adaptations in Homo sapiens Gary D. James Emerging Themes in Anthropology and Epidemiology: Geographic Spread, Evolving Pathogens, and Syndemics Lisa Sattenspiel and D. Ann Herring Demographic Estimation: Indirect Techniques for Anthropological Populations Timothy B. Gage Nutrition, Health, and Function Darna L. Dufour Ongoing Evolution in Humans Lorena Madrigal and Jessica Willoughby Primates Defined W. Scott McGraw Primate Behavior and Sociality Karen B. Strier Evolution of the Brain, Cognition, and Speech Dean Falk till The Past and the Dead Primate Origins: The Early Cenozoic Fossil Record Gregg F. Gunnell and Mary T. Silcox Catarrhine Cousins: The Origin and Evolution of Monkeys and Apes of the Old World David R. Begun The Earliest Hominins Scott W. Simpson Origins, Evolution, and Dispersal of Early Members of the Genus Homo G. Philip Rightmire Species, Populations, and Assimilation in Later Human Evolution Fred H. Smith Bioarchaeology: Health, Lifestyle, and Society in Recent Human Evolution

22 Paleopathology: A Contemporary Perspective Jane E. Buikstra	395
23 Issues in Forensic Anthropology Douglas H. Ubelaker	412
24 Paleogenetics: Ancient DNA in Anthropology Frederika A. Kaestle	427
Part IV The Living and the Dead	443
25 Diet Reconstruction and Ecology Using Stable Isotope Ratios Margaret J. Schoeninger	445
26 Current Concepts in Bone Biology James H. Gosman and Samuel D. Stout	465
'Growing Planes': Incremental Growth Layers in the Dental Enamel of Human Ancestors Debbie Guatelli-Steinberg	485
28 Understanding Skull Function from a Mechanobiological Persp David J. Daegling	pective 501
29 Tooth Form and Function in Biological Anthropology Peter S. Ungar and Peter W. Lucas	516
30 Locomotor Function across Primates (Including Humans) Daniel L. Gebo	530
Part V Science and Education	545
31 Science Education and Physical Anthropology Martin K. Nickels	547
Index	561