2a015b657d73b233339a289c03533ff3
ebrary

Bioarchaeology of East Asia

Bioarchaeological Interpretations of the Human Past:
Local, Regional, and Global Perspectives

2a015b657d73b233339a289c03533ff3
ebrary

2a015b657d73b233339a289c03533ff3
ebrary

UNIVERSITY PRESS OF FLORIDA

- Florida A&M University, Tallahassee
- Florida Atlantic University, Boca Raton
- Florida Gulf Coast University, Ft. Myers
- Florida International University, Miami
- Florida State University, Tallahassee
- New College of Florida, Sarasota
- University of Central Florida, Orlando
- University of Florida, Gainesville
- University of North Florida, Jacksonville
- University of South Florida, Tampa
- University of West Florida, Pensacola

2a015b657d73b233339a289c03533ff3
ebrary

2a015b657d73b233339a289c03533ff3
ebrary

2a015b657d73b233339a289c03533ff3
ebrary

2a015b657d73b233339a289c03533ff3
ebrary

2a015b657d73b233339a289c03533ff3
ebrary

Bioarchaeology of East Asia

Movement, Contact, Health

Edited by Kate Pechenkina and Marc Oxenham

Foreword by Clark Spencer Larsen

University Press of Florida
Gainesville/Tallahassee/Tampa/Boca Raton
Pensacola/Orlando/Miami/Jacksonville/Ft. Myers/Sarasota

The publication of this book is made possible in part by a grant from
Queens College of the City University of New York.

Copyright 2013 by Kate Pechenkina and Marc Oxenham

All rights reserved 2a015b657d73b233339a289c03533ff3

Printed in the United States of America. This book is printed on Glatfelter Natures Book, a paper
certified under the standards of the Forestry Stewardship Council (FSC). It is a recycled stock that
contains 30 percent post-consumer waste and is acid-free.

ebrary

This book may be available in an electronic edition.

18 17 16 15 14 13 6 5 4 3 2 1

A record of cataloging-in-publication data is available from the Library of Congress.
ISBN 978-0-8130-4427-9

The University Press of Florida is the scholarly publishing agency for the State University System
of Florida, comprising Florida A&M University, Florida Atlantic University, Florida Gulf Coast
University, Florida International University, Florida State University, New College of Florida, Uni-
versity of Central Florida, University of Florida, University of North Florida, University of South
Florida, and University of West Florida.

University Press of Florida
15 Northwest 15th Street
Gainesville, FL 32611-2079
<http://www.upf.com>

Contents

List of Figures vii
List of Tables xi
Foreword xv
Preface xvii

2a015b657d73b233339a289c03533ff3
ebrary

- 1. Research on Human Skeletal Biology in East Asia: A Historical Overview 1
Kate Pechenkina and Marc Oxenham
- 2. Human Ecology in Continental and Insular East Asia 28
Kate Pechenkina and Marc Oxenham

Part I. Biological Indicators of Population Histories in East Asia

- 3. The Population History of China and Mongolia from the Bronze Age to the Medieval Period (2500 BC–AD 1500) 61
Christine Lee
- 4. Mongolian Origins and Cranio-Morphometric Variability: Neolithic to Mongolian Period 85
Tumen Dashtseveg
- 5. A Nonmetric Comparative Study of Past and Contemporary Mongolian and Northeast Asian Crania 110
Erdene Myagmar
- 6. Tuberculosis and Population Movement across the Sea of Japan from the Neolithic Period to the Eneolithic 125
Takao Suzuki
- 7. Biological Connections across the Sea of Japan: A Multivariate Comparison of Ancient and More Modern Crania from Japan, China, Korea, and Southeast Asia 144
Michael Pietrusewsky
- 8. Population Dispersal from East Asia into Southeast Asia: Evidence from Cranial and Dental Morphology 179
Hirofumi Matsumura and Marc Oxenham

2a015b657d73b233339a289c03533ff3
ebrary

Part II. Community Health

9. Conflict and Trauma among Nomadic Pastoralists on China's Northern Frontier 213
Jacqueline T. Eng and Zhang Quanchao
10. Stresses of Life: A Preliminary Study of Degenerative Joint Disease and Dental Health among Ancient Populations of Inner Asia 246
Michelle L. Machicek and Jeremy J. Beach
11. Dental Wear and Oral Health as Indicators of Diet among the Early Qin People: A Case Study from the Xishan Site, Gansu Province 265
Wei Miao, Wang Tao, Zhao Congcang, Liu Wu, and Wang Changsui
12. Yangshao Oral Health from West to East: Effects of Increasing Complexity and Contacts with Neighbors 288
Kate Pechenkina, Ma Xiaolin, Fan Wenquan, Wei Dong, and Zhang Quanchao
13. Life on the Frontier: The Paleopathology of Human Remains from the Chinese Early Imperial Taojiazhai Mortuary Site 323
Zhang Jinglei
14. Bioarchaeological Perspectives on Systemic Stress during the Agricultural Transition in Prehistoric Japan 344
Daniel H. Temple and Clark Spencer Larsen
15. Change in the Linear Growth of Long Bones with the Adoption of Wet-Rice Agriculture in Japan 368
Kenji Okazaki
16. Trauma and Infectious Disease in Northern Japan: Okhotsk and Jomon 399
Marc Oxenham, Hirofumi Matsumura, and Allison Drake
17. A Paleohealth Assessment of the Shih-san-hang Site from Iron Age Taiwan 417
Liu Chihhsin, John Krigbaum, Tsang Chenghwa, and Liu Yichang
18. Trajectories of Health in Early Farming Communities of East Asia 444
Kate Pechenkina, Ma Xiaolin, and Fan Wenquan
19. East Asian Bioarchaeology: Major Trends in a Temporally, Genetically, and Eco-Culturally Diverse Region 482
Marc Oxenham and Kate Pechenkina

List of Contributors 499

Index of Subjects 501

Index of Archaeological Sites and Skeletal Collections 510

Figures

- 1.1. Pan Qifeng (潘其风), 2008 13
- 2.1. East Asia 29
- 3.1. Regional divisions of study area 62
- 3.2. Bronze Age cluster analysis 78
- 3.3. Iron Age cluster analysis 79
- 3.4. Medieval period cluster analysis 79
- 4.1. Geographic location of comparative Neolithic populations from Asia 89
- 4.2. Geographic location of studied human remains from Bronze and Early Iron Age of Mongolia 90
- 4.3. Geographic location of compared populations from Bronze and Early Iron Age of Asia 90
- 4.4. Geographic location of studied human remains from Xiongnu period of Mongolia 91
- 4.5. Geographic location of compared populations from Xiongnu period of Asia 91
- 4.6. Geographic location of studied human remains from Mongolian period of Mongolia 92
- 4.7. Geographic location of compared medieval and contemporary populations from Asia 93
- 4.8. Dendrogram showing relationships among Neolithic populations of Asia 98
- 4.9. Dendrogram showing relationships among Bronze and Early Iron Age populations from Asia 100
- 4.10. Dendrogram showing relationships among populations from Xiongnu period of Asia 102
- 4.11. Dendrogram showing relationships among medieval and modern Mongolians as well as populations from North Asia 103
- 4.12. Dendrogram showing relationships among ancient and contemporary populations of Mongolia 104