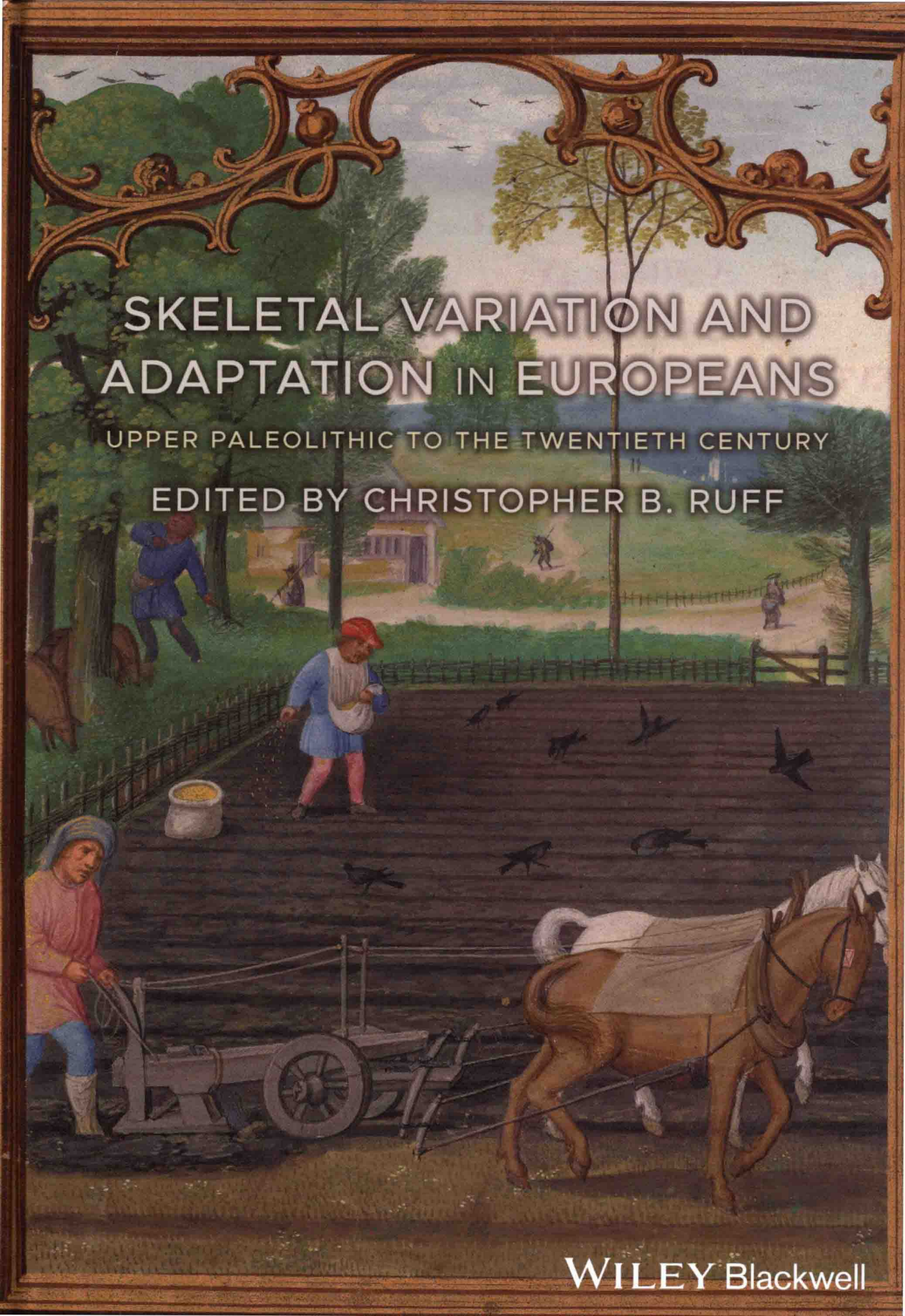

SKELETAL VARIATION AND ADAPTATION IN EUROPEANS

UPPER PALEOLITHIC TO THE TWENTIETH CENTURY

EDITED BY CHRISTOPHER B. RUFF

WILEY Blackwell

SKELETAL VARIATION AND ADAPTATION IN EUROPEANS

UPPER PALEOLITHIC TO THE TWENTIETH CENTURY

A comprehensive analysis of changes in body form and skeletal robusticity from the Terminal Pleistocene through the Holocene, leading to the modern European human phenotype.

Skeletal Variation and Adaptation in Europeans: Upper Paleolithic to the Twentieth Century brings together for the first time the results of an unprecedented large-scale investigation of European skeletal remains. The study was conducted over ten years by an international research team, and includes more than 2,000 skeletons spanning most of the European continent over the past 30,000 years, from the Early Upper Paleolithic to the 20th century. This time span includes environmental transitions from foraging to food production, small-scale to large-scale urban settlements, increasing social stratification and mechanization of labor, and climatic changes. Alterations in body form and behavior in response to these transitions are reconstructed through osteometric and biomechanical analyses.

Divided into four sections, the book includes an introduction to the project and comprehensive descriptions of the methods used; general continent-wide syntheses of major trends in body size, shape, and skeletal robusticity; detailed regional analyses; and a summary of results. It also offers a full data set on an external website.

- Brings together data from an unprecedented large-scale study of human skeletal and anatomical variations
- Includes appendix of specific information from each research site
- Synthesizes data from spatial, temporal, regional, and geographical perspectives

Skeletal Variation and Adaptation in Europeans will be a valuable resource for bioarchaeologists, palaeoanthropologists, forensic anthropologists, medical historians, and archaeologists at both the graduate and post-graduate level.

About the Editor

Christopher B. Ruff is Director of the Center for Functional Anatomy and Evolution at Johns Hopkins University School of Medicine, Baltimore, MD, USA. Dr. Ruff has published widely in the fields of human osteology, bioarchaeology, and paleontology, and has served as editor of the American Journal of Physical Anthropology and the Yearbook of Physical Anthropology.

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Upper Paleolithic to the Twentieth Century

Edited by Christopher B. Ruff

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Preface

Human body form is subject to a complex array of environmental influences, both natural and cultural in origin, acting throughout the lifespan. One way to approach this issue is through comparative studies of different populations exposed to varying environments. Adding temporal depth to such comparisons allows one to assess how populations respond through time to changing environmental conditions. In anthropology, this usually involves the use of skeletal material from historical, archaeological, or paleontological contexts. Many such studies have concentrated on fairly broad characteristics based on standard skeletal metrics, or have focused on specific areas of inquiry such as paleopathological indicators. More can be learned from skeletal remains, and the people represented by them, by incorporating other methods of analysis, including those based on engineering principles. The information obtained can shed new light on both the behavior and biology of past populations, and provide context for understanding modern human variation. This is what we have attempted to do here, for a large, representative sampling of European populations spanning the past 30,000 years and several major environmental transitions.

The investigations reported in this volume are the result of a collaboration that began in 2007 between Christopher Ruff, Brigitte Holt, Markku Niskanen, Vladimir Sládek, and Margit Berner. Subsequent data collection was primarily funded by the National Science Foundation (BCS-0642297 and BCS-0642710), with additional support from the Grant Agency of the Czech Republic (206/09/0589) and the Academy of Finland and Finnish Cultural Foundation. A symposium reporting some preliminary results was held at the annual meeting of the American Association of Physical Anthropologists in Portland, Oregon, in 2012.

The project expanded to include many co-authors from a number of different countries, who are represented among the chapters of the present volume. Many other people also helped with various aspects of the project. Those who assisted in collecting or processing of data include: Trang Diem Vu, Sarah Reedy, Quan Tran, Andrew Merriweather, Juho-Antti Junno, Anna-Kaisa Salmi, Tiina Väre, Rosa Vilkama, Jaroslav Roman, and Petra Spevackova. For access to skeletal collections and otherwise facilitating data acquisition, we thank Andrew Chamberlain, Rob Kruszynski, Jay Stock, Mercedes Okumura, Jane Ellis-Schön, Jacqueline McKinley, Lisa Webb, Jillian Greenaway, Alison Brookes, Jo Buckberry, Chris Knüsel, Horst Bruchhaus, Ronny Bindl, Hugo Cardoso, Sylvia Jiménez-Brobeil, Maria Dolores Garralda, Michèle Morgan, Clive Bonsall, Adina Boroneant, Alexandru Vulpe, Monica Zavattaro, Elsa Pacciani, Fulvia Lo Schiavo, Maria Giovanna Belcastro, Alessandro Riga, Nico Radi, Giorgio Manzi, Maryanne Tafuri, Pascal Murail, Patrice Courtaud, Dominique Castex, Fredérik Léterlé, Emilie Thomas, Aurore Schmitt, Aurore Lambert, Sandy Parmentier, Alessandro Canci, Gino Fornaciari, Davide Caramella, Jan Storå, Anna Kjellström, Petra Molnar, Niels Lynnerup, Pia Bennike, Leena Drenzel, Torbjörn Ahlström, Per Karsten, Bernd Gerlach, Lars Larsson, Petr Veleminsky,

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