# FORENSIC OSTEOLOGICAL ANALYSIS

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# FORENSIC OSTEOLOGICAL ANALYSIS

# **A Book of Case Studies**

Edited by

# SCOTT I. FAIRGRIEVE, Ph.D.

Anthropology Program and Department of Biology Laurentian University Sudbury, Ontario, Canada



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To my son Sean who is a constant source of pride, surprise and wonder.

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Dr. Hugo Ludena Restaure [note: he does not have a Ph.D. but is addressed as Dr. which is the Latin American custom] is an archaeologist by training, but as director of the Patrimony Division of the Institute of Culture, he developed the team to investigate the Pizarro identification. He personally researched the ethnohistorical sources and published a series of articles that helped convince authorities to place the remains identified in place of those that had occupied Pizarro's crypt for nearly a century. He is currently assisting at the Department of Anthropology at the National University of Federico Villareal in Lima (a department that will have a strong bio-

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#### **PREFACE**

Most books are born out of the perceived necessity by their authors. This book is no different from any other in that respect. As an instructor in forensic osteology it has been clear for the past several years that a new book of case studies was needed. Further, a book of case studies with background information on how osteological analysis is applied to human/faunal remains found in legal contexts would be particularly timely.

This book is primarily designed for students of forensic anthropology/osteology who have a background in human anatomy and/or osteology. Even with this assumption, I recognize the fact that other interested individuals lacking this background may very well want to read this book for its many case studies. As I tell my students, if you do come across a term that is unfamiliar, I would encourage the use of a medical dictionary.

Every few years it is important to put forward cases for the review of our colleagues and students. Although many journals, such as the *Journal of Forensic Sciences*, regularly publishes case reports, there are instances when a more detailed and full description of circumstances are warranted by the author. Further, beginning students initially require a more thorough treatment of the thinking behind the application of analytical techniques; an important aspect that may not be covered in the professional literature.

Based on the foregoing, the premise of this book is that each case has a unique quality and thus presents unique problems for the analyst to approach. It is important for the reader to understand the limits of forensic osteology by examining not only its successes but also its failures. This book presents this type of information "warts and all."

All of the contributions to this book (including my own) have been subjected to peer review. In each case two reviewers were assigned to each paper. This process greatly enhanced the value of each paper and made my job as editor much easier. To all of those individuals who acted as reviewers, I am truly grateful for your pariticipation in this project. It is also without question that this effort would not have been possible without the contributors who also shared my vision. I am indebted to each of them for their diligence and patience; and from a purely selfish point of view, I have benefited from my interaction with each and every one. I am also thankful for the

prompt, helpful, and courteous responses to all my questions by the publisher of this volume, Mr. Michael Payne Thomas. His encouragement made this project always a worthy endeavour. A final thank you to my laboratory manager, Ms. Tracy S. Oost (Hons.B.A., Hons.B.Sc.); her assitance in the lab, and with various other duties, sufficiently freed my time in order to work on this project.

S.I.F.

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