Contents

Notes on contributors, xiii Preface, xix Series preface, xxiii Foreword, xxv Acknowledgments, xxix About the editors, xxxi Glossary, xxxiii

Part I Context

- **1** Confrontation: where forensic science meets the sixth amendment, 3 *Jennifer C. Love and Laura C. Fulginiti*
 - 1.1 Sixth amendment, 4
 - 1.1.1 *Ohio v. Roberts*, 448 U.S. 56 (1980). Argued November 26, 1979 decided June 23, 1980, 5
 - 1.1.2 *Crawford v. Washington*, 541 U.S. 36 (2004). Argued November 10, 2003 decided March 8, 2004, 7
 - 1.1.3 *Melendez-Diaz v. Massachusetts*, 557 U.S. 305 (2009). Argued November 10, 2008 – decided June 25, 2009, 8
 - 1.1.4 *Bullcoming v. New Mexico*, 564 U.S. 647 (2011). Argued March 2, 2011 decided June 23, 2011, 10
 - 1.1.5 *Williams v. Illinois,* 567 U.S. 50 (2012). Argued December 6, 2011 decided June 18, 2012, 11
 - 1.2 Impact on forensic practitioners, 12
 - 1.A Appendix, 14
 - 1.A.1 Example of Florida application to compel testimony, 16
 - 1.A.2 Example of Arizona court order in response to Florida request, 17

References, 17

- **2** "Somewhere in this twilight": the circumstances leading to the National Academy of Sciences' report, 19

 Thomas Holland and Christian Crowder
 - 2.1 Introduction, 19
 - 2.2 The long road to *Daubert*, 202.2.1 The *Frye* standard of general acceptance, 20
 - 2.3 The federal rules of evidence, 22
 - 2.4 The rise of the toxic tort, 24
 - 2.5 *Daubert* and the supremacy of the FRE, 25
 - 2.6 The aftermath of Daubert, 28
 - 2.7 Llera Plaza and the assault on fingerprints, 28
 - 2.8 Fear, reality, and forensic anthropology, 30
 - 2.9 The gauntlet is thrown: the NAS gets involved, 31
 - 2.10 The CSI effect, 31
 - 2.11 The congressional response, 32
 - 2.12 The forensic sciences respond, 33
 - 2.13 Picking up the gauntlet, 34
 - 2.14 Conclusions, 35 Notes, 37 References, 38
- **3** From the laboratory to the witness stand: research trends and method validation in forensic anthropology, 41 *Jonathan D. Bethard and Elizabeth A. DiGangi*
 - 3.1 Introduction, 41
 - 3.2 Research in forensic anthropology a bibliometric survey, 43
 - 3.3 Court decisions and research, 48
 - 3.4 Conclusion and a path forward, 49 Acknowledgments, 50 References, 50
- **4** Expertise and the expert witness: contemporary educational foundations of forensic anthropology, 53 *Katelyn L. Bolhofner and Andrew C. Seidel*
 - 4.1 A brief historical overview of the discipline, 54
 - 4.2 The educational background of early forensic anthropologists, 55
 - 4.3 The forensic anthropologist as expert witness, 57
 - 4.4 Current educational programs and training opportunities, 58
 - 4.4.1 Contemporary educational programs for forensic anthropologists, 59

- 4.4.2 Casework and training opportunities, 63
- 4.5 Conclusion and future directions, 65 References, 67

Part II The rubber meets the road

- **5** Transparency in forensic anthropology through the implementation of quality assurance practices, 71
 - Julie M. Fleischman, Michal L. Pierce, and Christian M. Crowder
 - 5.1 Introduction, 71
 - 5.2 Overview of laboratory quality assurance and management, 74 5.2.1 Corrective and preventive actions, 74
 - 5.3 Training and continuous education, 74
 - 5.4 Importance of QA for anthropologists, 76
 - 5.5 Quality assurance for forensic anthropology methods and equipment, 77
 - 5.5.1 Establishing laboratory SOPs, 77
 - 5.6 Various measures of quality, 79
 - 5.7 Implications of QA in the courtroom, 855.7.1 Legal rulings affecting anthropology, 85
 - 5.8 Accreditation, 86
 - 5.9 Conclusions, 86 References, 87
- **6** Report writing and case documentation in forensic anthropology, 89 *Lauren Zephro and Alison Galloway*
 - 6.1 The audience(s), 90
 - 6.2 The report begins with documentation of workflow, 91
 - 6.3 Chain of custody, 94
 - 6.4 Managing the information flow, 94
 - 6.5 Processing the remains and storage considerations, 96
 - 6.6 Contemporaneous bench notes and standard forms, 96
 - 6.7 Casting, radiography, and other methods of documentation, 98
 - 6.8 The report, 98
 - 6.8.1 Format of the case report, 98
 - 6.8.2 Background, 99
 - 6.8.3 Condition of the remains, 100
 - 6.8.4 Biological profile, 101
 - 6.8.5 Trauma analysis, 102
 - 6.8.6 Postmortem interval and the time since death, 105
 - 6.8.7 Report summary and disposition, 106

- 6.9 Appendices, 106
- 6.10 Final steps, 107
- Conclusion, 108 6.11 References, 108
- **7** Skull shots: forensic photography for anthropologists, 109 Lauren Zephro and Alison Galloway
 - 7.1 Equipment, 110
 - 7.2 Taking photographs with an eye to courtroom presentation, 110
 - 7.3 Labeling photographs, 117
 - 7.4 Photomicroscopy and Videography, 118
 - 7.5 Image processing, 119
 - 7.6 Conclusion, 120 References, 121
- **8** The peer review process: expectations and responsibilities, 123 Kristen Hartnett-McCann, Laura C. Fulginiti, Alison Galloway, and Katherine M. Taylor
 - Introduction, 123 8.1
 - 8.2 Historical use of peer review, 124
 - 8.3 Principles underlying peer review in Forensic Anthropology, 125
 - 8.4 Available guidance on peer review, 126
 - 8.5 Considerations, 128
 - 8.6 Current status of peer review in forensic anthropological casework, 130
 - 8.7 Recommendations on peer review of forensic anthropology case work, 131
 - 8.8 Conclusions, 136 Acknowledgments, 136
 - 8.A Example of a peer review form (modified from Dana Austin, personal communication), 137
 - 8.B Example of a peer review form (modified from Lauren Zephro, personal communication), 138 References, 138
- **9** The United States justice system and forensic anthropology: preparing for court, 141

Daniel G. Martin and Laura C. Fulginiti

9.1 The United States court system, 141

- 9.1.1 Types of cases, 142
- 9.2 Understanding the judicial process, 143
 - 9.2.1 The criminal process, 144
 - 9.2.2 The civil process, 148
- 9.3 The role of the forensic anthropologist, 151
 - 9.3.1 Criminal cases, 151
 - 9.3.2 Civil cases, 160
- 9.4 The courtroom: etiquette and pitfalls, 162 References, 165
- **10** Litigation graphics in the courtroom presentation of forensic anthropology, 167

Gary Hodges

- 10.1 Color, 169
- 10.2 Font, 170
- 10.3 Layout, 170
- 10.4 Clarity of purpose, 172
- 10.5 The problem-solution approach to visual aids, 172
- 10.6 Case study, 174
- 10.7 Conclusion, 180 References, 181
- **11** Maintaining independence in an adversarial system: expert witness testimony in forensic anthropology, 183

Eric J. Bartelink, Laura C. Fulginiti, Alison Galloway, and Katherine M. Taylor

- 11.1 Criminal vs. civil cases, 185
- 11.2 Courtroom roles and rules, 187
- 11.3 Case studies, 189
 - 11.3.1 Case study 1, 189
 - 11.3.2 Case study 2, 191
 - 11.3.3 Case study 3, 193
 - 11.3.4 Case study 4, 195
- 11.4 Conclusion, 196

References, 197

12 Valuing your time: appropriate calculation of fees and expenses as an expert witness, 199

Alison Galloway, Eric J. Bartelink, and Kristen Hartnett-McCann

- 12.1 History of expert witnesses and compensation, 200
- 12.2 Models of compensation, 200
 - 12.2.1 Retainers, 201

- 12.2.2 Fee for service, 201
- 12.2.3 Fee for service considerations, 203
- 12.2.4 Pro bono, 205
- 12.2.5 Reasonable expenses, 206
- 12.3 Unethical billing practices, 207
- 12.4 Invoicing, 208
- 12.5 The professional expert, 209
- 12.6 Conclusions, 210
- 12.A Appendix, 211 References, 212

Index, 213