

Table of Contents

Part A

BIOLOGICAL INDICATORS AND METHODS OF DETERMINATION..... 1

Section 1

IDENTIFICATION FROM BIOMOLECULAR EVIDENCE..... 3

1 DNA 5

William Goodwin
Sibte Hadi

2 Stable Isotope Fingerprinting — Chemical Element “DNA”? 29

Wolfram Meier-Augenstein

Section 2

IDENTIFICATION FROM LATENT PRINTS55

3 Fingerprints 57

Vivianne Galloway
Dave Charlton

4 Earprints 73

Lynn Meijerman
Andrew Thean
Cornelis van der Lugt
George J.R. Maat

Section 3

IDENTIFICATION FROM THE SOFT TISSUES.....85

5 Physical Appearance 87

Ian Hill

6 Soft Tissue Pathology 99

Christopher Milroy

7 Soft Tissue Trauma 113

Guy N. Ruttly

8 Surgical Intervention 127

James Clarkson

Maureen Schaefer

9 Hair and Nail 147

Andrew S. Wilson

M. Thomas P. Gilbert

Section 4

IDENTIFICATION FROM THE HARD TISSUES175

10 Odontology 177

James H. Hardy

11 Osteology 199

Louise Scheuer

Sue Black

12 Radiography 221

Emily Hines

Catherine Rock

Mark Viner

Section 5

FACIAL IDENTIFICATION229

13 Facial Anthropology and Reconstruction 231

Caroline Wilkinson

14 Facial Recognition and Imagery Analysis 257

Geoffrey Oxlee

15 Identifying Persons by Their Iris Patterns 271

John Daugman

Section 6

IDENTIFICATION FROM METHODS OF COMMUNICATION287

16 Handwriting 289

Iain Henry Stewart

Section 7

IDENTIFICATION FROM PODIATRY AND WALKING301

17 The Foot 303

Wesley Vernon

18 Footwear Marks 321

Terry Napier

19 Gait 343

Michael G. Grant

Section 8

IDENTIFICATION FROM PERSONAL EFFECTS363

20 Personal Effects 365

Tim Thompson
Alan Puxley

21 Body Modification 379

Sue Black
Tim Thompson

Part B

THE CONTEXT AND SIGNIFICANCE OF FORENSIC HUMAN IDENTIFICATION.....401

Section 9

THE CONTEXT OF FORENSIC HUMAN IDENTIFICATION403

22 Identity Fraud and Theft 405

Natasha Semmens

23 Biometric Identity Cards 415

Tim Thompson

24 Missing Persons in the United Kingdom 425

Teri Blythe
Sophie Woodforde

25 Crimes against Humanity and Other War Crimes 445

Helena Ranta
Kari T. Takamaa

**FORENSIC HUMAN IDENTIFICATION
CASE STUDIES**

Index 501