

CHAPTER 1

Introduction

Douglas H. Ubelaker

Department of Anthropology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA

In August 2012, I had the pleasure to serve as an invited speaker at the 16th Congreso Nacional de Medicina Legal y Ciencias Forenses in Bogotá, Colombia. This scientific gathering brought together forensic scientists for several days of workshops, lectures and discussions on recent developments in the forensic sciences. While attending this conference, I was invited to tour the Instituto Nacional de Medicina Legal Y Ciencias Forenses in Bogotá and discuss the work conducted there. On this visit, I found most of the major areas of practice within the forensic sciences integrated together within this single organization. I was struck that practitioners of very different areas of the forensic sciences were located within close proximity of each other, offering opportunities for consultation, cooperation and integration. This structure contrasted with my own forensic experience and what I had observed in other areas of the world. Although I had impressions of such global variation from my travels and international contacts, I realized that very little was known and published on the issue.

At the time of the visit to the Colombian Instituto, my thoughts also concentrated on our newly formed AAFS book project "Forensic Science in Focus." A volume on the global variation in forensic practice seemed to be an ideal candidate to inaugurate the project. Such a volume also represented a logical sequitur to our 2011–2012 AAFS meeting theme "Global Research, The Forensic Science Edge" and the many international elements highlighted at our Atlanta meeting in February 2012. While most of us were aware of the global nature of the forensic sciences, relatively little was known on international variations in the structure and practice of the forensic sciences. During my visit to the Instituto, I approached colleagues there, seeking their impressions of my new idea. Their positive feedback inspired me to

continue discussion at the Congreso, where many colleagues also liked the idea and quickly responded with suggestions regarding countries, authors and issues that should be considered for inclusion.

The plan that emerged from this consultation and discussion consisted of invited chapters from authors relating to forensic practice in 30 individual countries. The 30 chapter limit enabled inclusion of sufficient countries to provide a sense of the patterns of global variation and yet provide the authors of each chapter a sufficient word count to cover the broad and varied themes involved. The selection of countries was made to provide a meaningful sample of the variation involved and to represent diverse geographical areas of the world. From the inception of the project, I realized that many countries with much to write about the practice of forensic science could not be included for reasons of limitations of space. Hopefully, those included provide a sense of the variation involved and reveal patterns that promote understanding. Authors were selected based on their scholarly reputations and the expectation that they could provide overviews of the forensic science issues examined in this volume. Since the volume seeks to cover most areas of the forensic sciences and most authors are specialists, all were encouraged to include co-authors as needed.

The authors who were contacted responded positively and enthusiastically. Many not only agreed to participate but offered helpful suggestions on volume coverage and thematic content. Once the lead author and country list was nearly complete, the proposal was reviewed and approved by our Forensic Science in Focus book project committee and the American Academy of Forensic Sciences (AAFS) Board of Directors was informed. With AAFS support, the proposal was submitted to Wiley-Blackwell for their peer review. Based on

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the reviews, the proposal and author/country list was adjusted, approved by Wiley-Blackwell and the writing/editing process was initiated.

Authors were given the following instructions (in addition to format information) in preparing their 9000 word chapters. These suggestions were offered to provide some uniformity in chapter structure and topics covered but with the expectation that authors would vary significantly in their approaches.

1.1 Chapter organization and information

- The title of each chapter should include the name of the country being discussed. For example, “The practice of forensic science in Argentina” or “History and current status of forensic science in Argentina.” The chapters will be presented in the volume in alphabetical order by country.
- Each chapter should contain information on all of the forensic sciences, to include:
Criminalistics, Digital and Multimedia Sciences, Engineering Sciences, Odontology, Pathology/Biology (including DNA and entomology), Anthropology/Archaeology, Psychiatry and Behavioral Science, Questioned Documents and Toxicology.
- Each chapter should address the following topics:

History within the country. This section can include history of key organizations within the country as appropriate.

Types of cases. Some information would be helpful on the variation of types of cases examined with statistical summaries as available.

Structure. How are forensic science initiatives organized within the country? Are they centralized within a particular institution or agency or more diversely organized?

Integration of forensic science. How is integration of forensic science achieved in crime scene investigation, case analysis, report writing and legal presentation? Are teams organized of the various specialties or are separate reports generated for integration later?

Recruitment. By what process are new forensic scientists hired or encouraged to enter the field?

Training. How do forensic scientists acquire the necessary education? Do universities within the country offer courses/training/degrees in the forensic sciences? Are training programs conducted by forensic institutions?

Funding. A brief discussion of funding issues would be useful. Are funding sources through the national government or through other channels? What factors impact funding for forensic science? Who decides on the budgets for forensic science and prioritizes the use of funds?

Political influences. How does the political climate and shifts in political orientations affect the practice of forensic science?

Certification. What certification programs exist for individual forensic scientists? By what process are the qualifications of forensic practitioners evaluated?

Laboratory accreditation/quality control. What procedures are in place for accreditation of laboratories and quality control? How do these vary within disciplines?

Technology. What are the key technology issues that affect the practice of forensic science?

Disaster preparedness. What plans are in place for disaster preparedness?

Legal issues. How does forensic perspective enter the legal arena? What court procedures affect presentations of forensic science?

Research. What key research is being conducted and by what process?

Future directions. What do you see as the key challenges facing forensic science in the country and what trends are apparent?

An additional suggestion was made by Dr. Stephen Cordner, co-author for the Australia chapter and passed on to all authors with encouragement for inclusion. This suggestion was “Most countries have big cases which go wrong involving forensic medicine and science. A good heading might be a very brief summary of 2–3 such cases, the main problems in forensic medicine and science which contributed to the cases going wrong, and the state’s response.”

To some extent, this volume represents a research project; gathering global data and perspective on the practice of the forensic sciences. The patterns and

perspectives that emerge from this work result from the commitment and hard work of each of the authors involved and their support teams. I thank all of them for embracing the concept of this volume from its inception and for accepting the challenge of attempting to synthesize so much information in such a limited format. I also extend my deepest appreciation to Rachel Ballard of

Wiley-Blackwell for her encouragement to attempt this volume, our AAFS leadership and the Forensic Science in Focus book project committee for their support and my team at the Smithsonian Institution, Keitlyn Alcántara, Kristin Montaperto, Christian Thomas and Marcia Bakry, who worked with me on the editorial effort to produce this volume.

