

BOOK REVIEW

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Review of: *The Forensic Laboratory Handbook Procedures and Practice*

REFERENCE: Mozayani A, Noziglia C, editors. The forensic laboratory handbook procedures and practice, 2nd edn. New York, NY: Humana Press, 2011, 600 pp.

The very first thing I do when reading a new book in forensic science is to go to the preface and look for the intended audience for the book. This bit of information should indicate the depth, breadth, and rigor of the book. Alas, the authors make no mention of the intended audience, and after reading the book, I was at a loss as to just whom the book is aimed at.

This book is the second edition of a volume that is edited by Carla Noziglia and Ashraf Mozayani. They have commissioned authors to write almost all of the 21 chapters. The overall theme of the book is forensic science laboratory practice and many, but not all of the chapters, have this orientation. The chapters run the gamut from laboratory information systems to accreditation, to firearms to traffic accident reconstruction, to illicit drugs to accreditation and certification. Unfortunately, there does not seem to be a coherent organization to the book. One could easily envision the book being organized, so that all of the more general chapters about laboratory practice and other general topics would have been put together and then the discipline-based chapters could also be grouped. This would make it much easier to navigate the book and to use it as a text, if one chose to do so. Some of the chapters are of high quality and could be aimed at a professional audience. Others are so brief, and they are little more than a detailed outline or brief overview of the subject and they would leave an audience of beginners grasping for more. Unevenness of coverage is a common issue with edited books in general, but in this book, it is quite extreme.

The chapters that are general in coverage include the following:

Laboratory accreditation: Good material but unclear who the audience is.

Crime reconstruction and evidence dynamics: There were some good case examples, but the chapter was very short and covered mainly the scientific method and reasoning.

Legal issues: Definitely aimed at the forensic science practitioner. It is comprehensive and detailed. It makes a very good starting point for getting into the intricacies of scientific evidence.

Quality in the laboratory: This is a very good chapter. Written by one of the acknowledged experts in the field, it provides clear, lucid explanations of the terminology that is so often misunderstood when discussing concepts like quality assurance and quality control.

Laboratory information systems: This is a good chapter and is a topic that is very seldom presented in forensic science books. It is refreshing to see this, and the chapter presents an excellent overview of this topic.

Forensic science facility planning: This is a welcome chapter that is very seldom covered outside of trade magazines. There is lots of information here that will appeal to the novice and lab manager alike.

The rest of the chapters in the book cover specific areas of forensic science. Most of these topics are found in standard forensic science textbooks. The biggest surprise in this group is the chapter on wildlife forensics. This is an area that is seldom covered in forensic science textbooks and other treatises. It is good to see it here. It is a very good introduction to the topic and is well illustrated.

The other topics in the specific area group include the following: forensic biology, controlled substances, explosives and arson, fingerprints, digital evidence, firearms and toolmarks, odontology, pathology, questioned documents, toxicology, trace evidence, entomology, anthropology, and engineering. Some are quite noteworthy. The forensic biology chapter is right up to date. The chapter on controlled substances contains a lot of material on the examination of evidence that goes beyond the narrow field of drugs and could apply widely to evidence. The chapter on fingerprints is recommended. It has many good illustrations that are effective in getting the material across. Likewise the entry on firearms and toolmarks is excellent.

Some of the chapters are disappointing because of their brevity and lack of adequate coverage of the subject. These include chapters on digital evidence and odontology, which did not have a single illustration in the whole chapter; and questioned documents, which covers essentially only handwriting. The chapter on trace evidence was very brief and could best be described as an outline of the field—a major disappointment. I also found the chapter on forensic engineering to be lacking. It covers only motor vehicles and traffic accident reconstruction. The important areas of material analysis and structural failures, to name two, are omitted.

In summary, there is a lot of good information in this book. Some of the chapters are outstanding and others are disappointing. It is very uneven in its treatments of the various topics, especially in their depth of coverage. It has no discernible organization. I would like to recommend this book, but I just do not know to whom.

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