It takes two for the truth – one to speak and another to hear
—Thoreau

Mention a forensic science laboratory and Abby of NCIS might spring to mind. Nice, but not exactly a reality. Perhaps you think of writers such as Sir Arthur Conan Doyle (closer) or Kathy Reichs (reality). Whatever your persuasion, forensic science is and has been interesting to the public for many years.

In this Forensic Handbook, 21 of the best of the best, the cream of the crop, the “Energizer bunnies of forensic science” (to quote Abby) have written of their specialties in the careers they love. These are real world heroes and heroines who fight crime not with a cape, but a lab coat.

Just as forensic science has become more in depth and broader in scope, so, too, has this second edition. This edition contains 21 chapters to the first edition’s eight chapters, giving the reader a better insight into more uses of forensic science.

There are more issues in, more challenges to, and more applications of the principles of forensic science than ever before. The information gleaned from the testing of evidence yields much more information. The procedures, analytical instruments, and interpretation of results in forensic science require the scientists to have higher and broader levels of knowledge, skill sets to encompass the tiny micro to the vast macro levels of evidence, and a myriad of abilities both in the laboratory and in the courtroom. Thus, they who perform the testing must have more and more education and career-long continuing education. The practices have also reached into areas unheard of a mere ten years ago, such as anything digital. This has resulted in scrutiny of procedures, practices, laboratories, and people. Accreditation of laboratories and certification of scientists are now the accepted norm. From the first collection of evidence through analysis and interpretation to the final presentation to courts and other official bodies, ethics must be the guiding principle. The myriad legal issues of evidence and testimony are presented.

The well-appointed and well-equipped laboratories of today are a far cry from the closets (literally) where scientists were relegated. Safety procedures, contamination abatement, and ergonomic modules now allow the scientists to work in comfortable areas, with the latest in technology, following strict standards. Thus, one chapter discusses planning and design of a laboratory.
And not to forget the animal kingdom, the reader will learn how insects and bugs can assist in determining many things including a margin of time of death. You will read about the Fur, Fin, and Feather Lab, where scientists practice forensic protocols as applied to animals and their products.

In reading this handbook, you will find that, in many chapters, authors have discussed similar areas: accreditation, certification, ethics, the National Academy of Science report, and quality. These important facets of forensic science apply to varied disciplines.

No forensic handbook would be complete without the tried and true forensic disciplines: fingerprints, trace evidence, chemistry, biology, explosives and arson, forensic anthropology, forensic pathology, forensic documents, and firearms and toolmarks. However, even here, there are new and modern practices.

New to this edition are questions at the end of each chapter that can be used by the reader or, if used as a text, by the instructor. Also, at the end of each chapter is a brief biography of the author.

If these chapters tweak your interest, you will find information about educational requirements. To assist you, the Appendices contain resources such as national and international degree programs, forensic societies and websites, and granting organizations. With the advent of technology, old evidence has been tested successfully, and, indeed, the truth has set some free.

There is but one goal to which all of this progress is directed: truth. Enjoy your reading and may the truth be with you.

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