

# A Review of Forensic Science Management Literature

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## TABLE OF CONTENTS

INTRODUCTION .....	54
I. EXTERNAL FACTORS FACED BY THE FORENSIC SCIENCE	
INDUSTRY .....	54
A. Accreditation .....	54
B. Education and Research .....	55
C. Funding of Forensic Sciences .....	56
D. Science and Law .....	56
II. LEADERSHIP AND ORGANIZATION IN FORENSIC SCIENCE .....	58
A. Crime Scene Management .....	58
B. Leadership in Forensic Science .....	58
C. Management .....	59
D. Staffing .....	60
III. BUSINESS REALITIES FACED BY THE FORENSIC SCIENCE	
INDUSTRY .....	61
A. Quality .....	61
B. Efficiency .....	62
CONCLUSION/COMMENTARY .....	64
ACKNOWLEDGMENTS .....	64
REFERENCES .....	64
ABOUT THE AUTHORS .....	68

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**ABSTRACT:** The science in forensic science has received increased scrutiny in recent years, but interest in how forensic science is managed is a relatively new line of research. This paper summarizes the literature in forensic science management generally from 2009 to 2013, with some recent additions, to provide an overview of the growth of topics, results, and improvements in the management of forensic services in the public and private sectors. This review covers only the last three years or so and a version of this paper was originally produced for the 2013 Interpol Forensic Science Managers Symposium and is available at [interpol.int](http://interpol.int).

**KEYWORDS:** Accreditation, crime laboratory, crime scene, education, effectiveness, efficiency, evidence, forensic science, FORESIGHT, funding, law, law enforcement, leadership, management, personnel, planning, policy, privatization, quality, staffing.

## INTRODUCTION

The management of forensic science is a new topic for this review, but a crucial one. The fact that it is now to be included in all Interpol Forensic Science Managers Symposia — and that the name of the symposium has gained the word “Managers” — is indicative of the importance of research that goes beyond advances in scientific methods, and explores the proper delivery of forensic services. Although some papers appear in what are typically science journals, one of the strongest signals of the importance of management to forensic science is the creation of a new journal, *Forensic Science Policy and Management: An International Journal* published by Taylor and Francis and edited by Houck and Siegel. The journal is the official publication of the American Society of Crime Laboratory Directors (ASCLD) and publishes articles in management, leadership, quality, education, process improvement, and related topics. Many of the articles mentioned herein come from that journal.

One of the main difficulties in the writing of this review is where to draw the line — when does an article on science or medicine stop and when does it become one on management? Is ethics part of management and, if so, what part; if not, then where? Also, it is tricky to find articles on management in forensic science given the ubiquity of the word “manage” in titles that have little or nothing to do with “management”. Therefore, articles may have been overlooked, with apologies. It is anticipated that the categories for this review in the next edition will change, reflecting the shifting landscape of issues, concerns, and solutions for forensic laboratory managers. The increase in information and eagerness to report on and discuss topics of management in the forensic sciences is heartening; the science is important, yes, but so is how it’s managed. In a world

that competes for access to scarce resources, efficiency and effectiveness are likely as important as the science behind the production process.

This review is organized into three broad categories: the external factors affecting forensic science, the leadership and organization of the industry, and the business realities the industry faces. The main topics within those categories derived from the literature for this review are accreditation, crime scene management, education and research, efficiency, funding, leadership, management, quality, science and the law, and staffing. A short conclusion and commentary on the closure of the UK Forensic Science Service is also included.

## I. EXTERNAL FACTORS FACED BY THE FORENSIC SCIENCE INDUSTRY

### A. Accreditation

Accreditation is an external check on qualifications and minimum standards of a quality system. An accreditation scheme should be adaptable and flexible to assure quality in the face of changing system requirements and scientific methods. Funding, regulatory guidance, and time management are significantly affected by accreditation. Important findings were identified in the evaluation of forensic laboratory accreditation, comparing different processes and suggesting possible solutions.

Accreditation emphasizes developing procedures that can be continuously improved upon rather than adhering to traditional strict protocols [10], recognizing the inherent push for improvement in any quality system. Sharing of data, technologies, standards, policies, and protocol development through a central point of contact or group allows for a coordination of knowledge and capabilities [68]. Though the concept of an external



## ABOUT THE AUTHORS

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Max M. Houck received B.S. (1984) and M.A. (1988) degrees from the Department of Anthropology, Michigan State University (East Lansing, MI). In 2010 he was granted a Ph.D. degree in applied chemistry by Curtin University (Perth, Australia). Dr. Houck is currently the director of the Department of Forensic Sciences, District of Columbia Consolidated Forensic Laboratories (Washington, DC).

Dr. Houck has worked in the private sector, the public sector (at the regional and federal levels), and in academia. His anthropology and trace evidence casework includes the Branch Davidian Investigation, the September 11 attacks on the Pentagon, the D.B. Cooper case, the US Embassy bombings in Africa, and the West Memphis Three case, among hundreds of others.

Dr. Houck has published in a wide variety of areas in the forensic sciences, in books, book chapters, and peer-reviewed journals. He has also co-authored a major textbook with Dr. Jay Siegel, (Houck MM, Siegel JA: *Fundamentals of Forensic Science*, 2nd ed; Academic Press: Burlington, MA; 2010).

Dr. Houck is an internationally recognized forensic expert with research interest in forensic science, education, and the forensic enterprise and its industries. He served for six years as the chair of the Forensic Science Educational Program Accreditation Commission (FEPAC). He is a founding co-editor of the journal *Forensic Science Policy and Management*, with Dr. Siegel.

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William P. McAndrew received a B.S. in finance and a B.S. in economics in 2009 from the Pennsylvania State University (Erie, PA), and earned his Ph.D. degree in economics from West Virginia University (Morgantown, WV) in 2014. Dr. McAndrew is currently an assistant professor of economics at Gannon University (Erie, PA).

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