



Barry A. J. Fisher

served as the Crime Laboratory Director for the Los Angeles County Sheriff's Department, a position he held from 1987 until his retirement in 2009. He began his career in criminalistics with the Sheriff's crime lab in 1969 and worked in a wide variety of assignments. His current interests concern the interrelationship between forensic science and the law, along with public policy issues concerning the timely delivery of quality forensic support services to the criminal justice system. More recently, he has been working on ways to improve international collaboration among forensic scientists.

Fisher is a member of many professional organizations. He is a Distinguished Fellow and past president of the American Academy of Forensic Sciences and was awarded the Academy's highest award, the Gradwohl Medallion. He served as president of the International Association of Forensic Sciences and the American Society of Crime Laboratory Directors. He was a past chairman of the American Society of Crime Laboratory Directors-Laboratory Accreditation Board.

Fisher has been a member of several editorial boards: the *Journal of Forensic Sciences*, the *Journal of Forensic Identification*, *Forensic Science Policy and Management*, *Forensic Science Research*, and the *McGraw-Hill Encyclopedia of Science and Technology*. Fisher is an alumni member of the Council of Scientific Society Presidents, a life member of the International Association of Chiefs of Police, and a member of the IACP's International Police Strategic Communications, IMPACT Section.

His textbook, *Techniques of Crime Scene Investigation*, in its 9th edition, enjoys wide popularity. He is a co-author of two other books, *Forensics Demystified* and *Introduction to Criminalistics: The Foundation of Forensic Science*. Fisher speaks throughout the United States and has lectured in Canada, England, Australia, Singapore, France, Israel, Japan, China, Turkey, Dubai, Portugal, India and Malaysia on forensic science laboratory practices, quality assurance, and related topics. In 2000, he was invited by the People's Republic of China to lead a forensic science delegation to lecture to speak with forensic scientists there. In 2012, he was invited again to China to lecture on forensic science developments in the United States. In 2017, he was invited to be a guest plenary speaker at a forensic science conference in Dubai.

Since retiring, Fisher has consulted for the United Nations Office on Drugs and Crime, the United States Department of Justice, the International Criminal Investigative Training Program (ICJTAP), and Analytic Services Inc., a not-for-profit institute that provides studies and analyses to aid decision-makers in national security, homeland security, and public safety. He is currently a senior forensic science advisor with Park Dietz and Associates, a forensic consulting firm offering expertise in a variety of disciplines in civil and criminal litigation.

Fisher grew up in the Bronx in New York City and received his Bachelor of Science degree in Chemistry from the City College of New York. He holds a Master of Science degree in Chemistry from Purdue University and an M.B.A. degree from California State University, Northridge. Barry and his wife Susan reside in Indio near Palm Springs, California. They have two married sons: David is a Senior Lecturer and Director of the New Jersey Institute of Technology Forensic Science Program, and Michael is an entrepreneur. He and Susan are grandparents of eight grandchildren!

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From Crime Scene to Courtroom

This lecture offers a comprehensive overview of the role forensic science plays in the criminal justice system, tracing its development from early history to cutting-edge innovations. Beginning with a brief historical survey, the session highlights key milestones—from ancient fingerprint use to the modern DNA revolution—that have shaped forensic practice.

The lecture then examines how forensic science influences criminal investigations, describing core disciplines such as fingerprint analysis, DNA profiling, ballistics, toxicology, and digital forensics. Real-world case studies illustrate how forensic evidence contributes to both solving crimes and correcting wrongful convictions.

A critical portion of the presentation explores the legal landscape, focusing on the evolving standards for admitting forensic evidence in court. The discussion covers the Frye and Daubert rulings, the impact of the 2009 National Academy of Sciences report, and the increasing scrutiny of pattern-based techniques like bite mark and hair analysis. These developments underscore the need for scientifically valid and legally reliable methodologies.

Finally, the session introduces recent innovations driving the future of forensic science, including rapid DNA testing, genetic genealogy, digital and mobile forensics, and artificial intelligence applications. These advancements offer powerful tools but also raise complex ethical and legal challenges.

Through this multifaceted lens, the lecture emphasizes the importance of balancing technological progress with scientific rigor and judicial integrity. Participants will leave with a deeper understanding of forensic science's transformative impact and the critical need for continuous reform and responsible application.