

FSSA

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The Official Newsletter of the Forensic Social Sciences Association

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Editor's Note:

I am very pleased to introduce Spring 2018, Volume 3, Number 1 of the *Forensic Social Scientist*, the Official Newsletter of the Forensic Social Sciences Association (FSSA). As an international and interdisciplinary organization, the Association is dedicated to advancing training at the undergraduate, graduate, and postdoctoral levels, practice issues such as the development of certification in forensic social sciences, policy initiatives, and research in the forensic social sciences. The FSSA is currently planning to launch undergraduate and graduate courses, certification programs in the forensic social sciences, the first ever *Journal of the Forensic Social Sciences*, and other publications.

Please send your composite expert witness/government expert testimony and consultation case summaries, articles, curriculum, commentaries, announcements, and other newsletter items to Dr. Dennis Savard at: dmsavard40@gmail.com.

For more information about the FSSA, please visit us at <https://www.forensicsocialsciencesassoc.com> Information about the FSSA is also on ResearchGate, Google, and Yahoo.

In this issue, the *Forensic Social Scientist* highlights forensic trends and issues, including the work and accomplishments of forensic social scientists.

Below, Dr. Kevin Fox Gotham, Department of Sociology, Tulane University, USA., analyzes the differences between criminalists and forensic criminologists.

Stephen J. Morewitz, Ph.D.

Featured Article

An Essay by Dr. Kevin Fox Gotham:

Criminalistics and Forensic Criminology

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Forensic criminologists are not criminalists. Criminalists practice criminalistics, which is a field of forensic investigation that emphasizes individualization and pattern matching – e.g., the effort to associate a crime scene mark or object with its source. Criminalistics involves the comparison of fingerprints, handwriting, bitemarks, voiceprints, toolmarks, firearms, tire prints, shoe prints, and so on. The goal of criminalistics investigation is to link a latent fingerprint, a writing, a bitemark, a bullet, or similar objects to the one and only finger, writer, teeth, gun, or other specific object that made the markings. The objective of forensic identification science is individualization which is the process of placing an object in a unique and sui generis category. The crime scene investigation techniques of individualization and pattern matching are popular within the forensic fields of fire, arson and explosives, gunshot residue, comparative bullet lead analysis, and aspects of forensic pathology. While many forensic criminologists have a basic understanding of criminalistics, they seldom develop such a mastery as to consider themselves experts in its practice.

There are four major differences between forensic criminologists and criminalists. First, forensic criminological research is founded upon the scientific method. Forensic criminologists employ rigorous analytical techniques to make observations, formulate hypotheses, gather data to test hypotheses, and develop theories and explanations of crime events. In contrast, the subfields and investigative techniques of criminalistics have come under heated criticism in recent years with critics stigmatizing them as “non-science” approaches (Saks and Faigman 2008, p. 168). According to an oft-cited National Research Council (NRC) (2009) report, in non-science forensic disciplines, “forensic science professionals have yet to establish either the validity of their approach or the accuracy of their conclusions, and the courts have been utterly ineffective in addressing this problem” (p. 109). The NRC report found that “no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source” (p. 7). “The simple reality,” as noted by the NRC, “is that the interpretation of forensic evidence is not always based on scientific studies to determine its validity” (pp. 7, 8). Saks and Faigman (2008) note that criminalistics investigators rarely use the scientific method in their research or submit their findings for peer review.

Second, forensic criminological research is theoretically driven with explanations of crime events tied directly to theoretically derived propositions. A criminological theory is a set of two or more propositions in which concepts – terms that we use to classify and categorize knowledge about the social world – refer to social phenomena, which researchers assume to be causally related.

While not all criminologists may accept this definition verbatim, many criminologists share the sentiments this definition of theory expresses. A theory describes the relationship between component concepts and propositions depict relationships in a causal fashion. A theory scope conditions include the time and place within which the phenomenon (crime event) supposedly occurred. A theory's units of analysis may be the actual crime event, individuals (e.g., offenders, victims, and place managers), complex organizations, small groups, laws, socio-legal regulations, and so on. Individualization and pattern matching do not address questions of causality or explain how and why questions about social phenomena. For social scientists and criminologists, theories must be capable of being put into proposition form if they are to qualify under a scientific definition of acceptable social science criminological theory.

Third, a forensic criminologist uses case evidence materials and criminological theories to develop testable hypotheses which function as statements about relationships among observable phenomena (e.g., the crime event and related contextual factors). In so doing, the forensic criminologist may apply different levels of analysis and deductive and inductive reasoning to understand and explain the etiology of a crime event. Deduction is a form of reasoning that moves from the general to the specific, a top-down approach to understanding evidence. Inductive reasoning moves from specific observations to broader generalizations and theories, a bottom-up approach. In deductive reasoning, a criminologist might begin with a pre-existing theory about a topic of interest in the legal case. S/he then develops more specific hypotheses that s/he can apply to the case and then test. The process then narrows down even further when the investigator collects observations to address the hypotheses. The process of research ultimately leads the forensic criminologist to test the hypotheses with specific data -- a confirmation (or not) of the original theories. In inductive reasoning, the forensic criminologist begins with specific observations and measures to detect patterns and regularities. S/he then formulates tentative hypotheses that can be explored, and finally s/he ends up developing some general conclusions or theories about the crime event. Importantly, most forensic criminological research involves using both inductive and deductive reasoning processes in an investigation. For an overview of the use of inductive and deductive reasoning in forensic criminology, see Petherick and Ferguson (2017).

Fourth, researchers and investigative journalists have drawn attention to the unsupported assumptions, exaggerated claims, and outright fraud that sometimes affect the subfields of criminalistics. Cole (2008) suggests that the rules of practice that formed the basis for the authority and credibility of latent fingerprint examination (LFPE) during the twentieth century have proven to be vulnerable to a contemporary resurgence of interest in establishing the scientific foundations of forensic evidence. The Federal Bureau of Investigation (FBI) no longer allows its experts to testify that fingerprint analysis is infallible, thus acknowledging that fingerprint identifications are subject to error. As researchers have noted, the findings of criminalistics experts have been particularly vulnerable to cognitive and contextual bias. Dror and colleagues (2006) found that it is possible to alter identification decisions on the same fingerprint, solely by presenting it in a different context (see also Dror and Charlton 2006). Turvey (2013) has documented an alarming number of cases in which criminalists in criminal cases have deliberately offered fraudulent evidence to the courts.

Finally, we can understand the problems and limitations of criminalistics by recognizing that the research culture in criminalistics is underdeveloped and lacks clear strategies for standard setting, managing accreditation and testing processes, and developing and implementing rulemaking, oversight, and sanctioning processes. The investigative techniques of individualization and pattern matching used widely in criminalistics often fail to meet widely recognized legal standards for scientific reliability including peer review and rigorous evaluation. Forensic examiners that employ pattern matching and individualization typically work in a law enforcement environment that is geared toward prosecuting criminal suspects, a concern that may be at odds with and even hostile toward the scientific method. Over the decades, forensic

practices have been developed by law enforcement to assist in criminal investigations. Crime labs are often housed in police departments, staffed by police officials. Scholars and researchers suggest that these connections to police and prosecutors may compromise the independence of criminalists and could create frequent opportunities to inject biases into the investigation process (National Research Council 2009).

In contrast, the research culture in forensic criminology is founded upon the scientific method and infused with clear codes of ethics and professional behavior governing the responsible conduct of research. Forensic criminology has strong ties to the broader field of criminology and related social sciences – anthropology, economics, geography, psychology, and sociology – through national research and teaching communities, government funders, and longstanding professional organizations. Unlike the field of criminalistics, the forensic criminologist's close connections to the social science disciplines means that the research process is designed to follow quality control procedures to identify mistakes, fraud, and bias. In U.S. universities, graduate students in the social sciences are usually introduced to a series of training tools in their courses and research activities including conflicts of interest - personal, professional, and financial; policies regarding human subjects; mentor/mentee responsibilities and relationships; collaborative research including collaborations with industry; peer review; data acquisition management; research misconduct and policies for handling misconduct; responsible authorship and publication; the scientist as a responsible member of society; contemporary ethical issues in research; and the environmental and societal impacts of scientific research. These research training tools can provide guidance to the forensic criminologist in determining how well his/her specific plans for responsible conduct of research compare with the best practices accumulated over the past decades by the research training community.

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Forensics in the News

DNA Testing on the Possible Remains of a 17th Century Pirate

Forensic scientists at the University of New Haven in Connecticut traveled to the UK to collect a DNA sample from a fifth-generation nephew of the 17th Century Whydah pirate ship captain, Samuel “Black Sam” Bellamy, to determine if human remains found at the scene of recovered Wydah pirate ship are those of Bellamy. The Wydah pirate ship was reportedly wrecked during a storm in 1717, and Bellamy was believed to be one of the pirates who went down with the ship off the coast of Wellfleet.

University of New Haven scientists are using Y-STR analysis to determine if the human remains matches the DNA from the fifth-generation nephew. Y-STR markers pass down through paternal lineage. These markers do not vary over the generations, improving the reliability of the analysis.

Retrieved from: <http://www.capecodtimes.com/news/20180408/whydah-investigators-using-dna-in-quest-to-id-pirate-remains>

Forensic Social Scientist Testified about Proposed Policy Changes in Federal Prison Sentencing before U.S. Senate Judiciary Committee

Dr. Matt DeLisi, a Professor of Sociology at Iowa State University, was part of a panel invited to testify before the U.S. Senate Judiciary Committee about proposed policy changes including allowing federal judges more discretion in cases involving mandatory minimum sentences and reducing the minimum amount of time inmates must serve.

Dr. DeLisi testified that these proposed policy changes would increase the probability that inmates would re-offend after being released from prison. He cited an investigation that was based on almost 20 years of prisoner data. That study revealed that one offender has a likelihood of committing 17 new offenses after being released from prison. Dr. DeLisi also testified that criminals still pose a risk to society regardless of their age. To illustrate this finding, he described the case of an 85-year-old sex offender who lived in a nursing home reportedly assaulted a 95-year-old woman who also lived in the facility.

Retrieved from:

<https://www.news.iastate.edu/news/2013/11/12/delisioffenderreduction>

FSSA Journal of Forensic Social Sciences

The FSSA is preparing to launch its official journal, the *Journal of Forensic Social Sciences (JFSS)*. The FSSA is preparing a Potential *JFSS* Institutional Subscriber Database/Directory to further delineate the market for the *JFSS*. Please contact Dr. Stephen J. Morewitz, California State University, Department of Nursing and Health Sciences (stephen.morewitz@csueastbay.edu), for more information.

Future Meetings of the FSSA

The FSSA is very pleased to announce that the first annual meeting of the FSSA will be held April 4-5, 2019 at the Université de Reims, faculté de droit. The second annual meeting will be held at Staffordshire University (Date: TBA). Please contact Dr. Stephen J. Morewitz, California State University, Department of Nursing and Health Sciences (stephen.morewitz@csueastbay.edu), for more information.

Achievements of FSSA Members

Professor Martine EVANS (aka Herzog-Evans), Ph.D.

Professor Martine EVANS (aka Herzog-Evans), Ph.D., Université de Reims, faculté de droit/ University of Rheims, Law faculty, is President of the French Confédération Française de la Probation <http://www.lacfp.net/>

Professor Martine EVANS (aka Herzog-Evans), Ph.D., Université de Reims, faculté de droit/ University of Rheims, Law faculty, France Tel : 33-6 60 12 15 75 (France) : 44-758 328 5600 (UK)website: <http://herzog-evans.com>; Twitter account: @ProfMEvans

Dr. Mark L. Goldstein

Dr Mark L Goldstein presented a paper, "Evaluation of Real Versus False Allegations of Child Abuse in Forensic Cases," at the International Congress on Law and Mental Health conference in Prague, Czechoslovakia in July 2017.

Dr. Stephen J. Morewitz

Dr. Stephen J. Morewitz's research on the *Steamship Quanza* Holocaust survivors story is featured at the National Mall in Washington, DC, in the United State Holocaust Memorial Museum (USHMM) exhibit, "Americans and the Holocaust," a 3 + year special exhibit celebrating the 25th anniversary of the USHMM. Dr. Morewitz is co-producer of the new documentary, *Nobody Wants Us: The Story of the Steamship Quanza Holocaust Survivors*, Curator of the *Steamship Quanza* Museum Exhibit, and co-author of the play, *Steamship Quanza* (with Susan Lieberman), which premiered in Chicago, IL, at the Chicago Dramatist in Chicago, IL, and showcased in Dr. Morewitz's Solo Author Exhibit at the California State University, East Bay, Library.

Lisa Taylor-Austin, NCC, LPC, LMHC, CFMHE, CFBA

Lisa Taylor-Austin, NCC, LPC, LMHC, CFMHE, CFBA, an internationally recognized gang expert, was interviewed in the *Christian Science Monitor* about the effectiveness of gang intervention programs, including the “Boston Uncornered” program, which offers stipends to gang members in Boston to renounce their gang affiliations, assists with their education, mentors them, helps them obtain financial aid, and provides other services to enhance their lives (<https://thetayloraugstingroup.com/wp-content/uploads/2017/01/CSMonitor.pdf>)

Lisa Taylor-Austin is a Board Certified Forensic Behavioral Analyst. Lisa Taylor-Austin was trained by Dr. Gregory M. Vecchi, Chief (retired) of the legendary Behavioral Sciences Unit of the Federal Bureau of Investigation (FBI). After intensive training and passing a rigorous written examination, she became the fifth person in the nation and only professional in Connecticut to hold the distinction of national board Certified Forensic Behavioral Analyst. She has been trained by Dr. Vecchi in behavioral aspects of active shooters, conflict and crisis management, psychopathology, active listening in crisis situations, threat assessments at work and school settings and working to support a hostage negotiation teams.

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