

SEMINAR SPEAKERS & ABSTRACTS



**Chesapeake Bay Division - IAI
2024 Winter Seminar**

March 16, 2024

Loyola University
Baltimore, Maryland

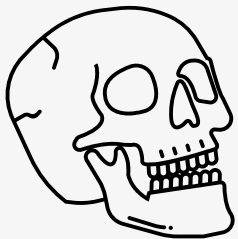
Christina Hurley

CODIS and Unidentified Remains

Chrissy has worked at the Baltimore Police Department for 17 years. She began her work there as a Serologist, then worked as a DNA Technician until her DNA Analyst training was completed in 2012. She became the Local CODIS Alternate for Baltimore City in October 2013, but her main focus remained on casework until October 2018, when she was appointed as the CODIS Administrator.

Chrissy has a BS in Forensic Chemistry from West Chester University of PA and a Master of Science in Pharmacy, with concentration in Forensic DNA and Serology from the University of Florida.

She lives in northern Baltimore County with her husband, 2 kids, a dog, and 2 hamsters. She enjoys being outdoors and has hiked 20 of the Adirondack's High Peaks in upstate New York.



CODIS and Unidentified Remains

In the Forensic Biology section of a law enforcement agency, the use of a DNA database aids in the identification of evidence samples and unidentified remains samples. The Combined DNA Index System (CODIS) is a software program owned by the FBI.

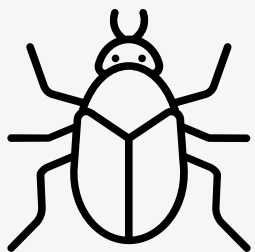
This presentation will discuss what CODIS is, how it works, the extent of its use, and why it is used in criminal and missing persons/unidentified remains investigations. We will also take a look at a collaborative unidentified remains project between the Baltimore Police Department, Bode Technology, and other law enforcement agencies across the country.

David Rivers

Collection & Preservation of Entomological Evidence

David Rivers is Professor and Chair of Forensic Science at Loyola University Maryland. He received his B.S. in Biology from Ball State University, a Ph.D. in Entomology with a concentration in Insect Physiology from the Ohio State University, and was a NIH post-doctoral fellow in Cellular and Molecular Parasitology at the University of Wisconsin. He joined the faculty at Loyola in 1994, was named the Harry Rodgers III Teacher of the Year in 1999, the Distinguished Scholar of the Year in 2019, and became the founding chair of the Department of Forensic Science in 2023. He developed the forensic studies undergraduate program and graduate programs in Forensic Pattern Evidence and Biological Forensics at Loyola.

Dr. Rivers is a member of the North American Forensic Entomology Association, Entomological Society of America, American Academy of Forensic Sciences, Council of Forensic Science Educators, Cold Case Foundation and Super Sleuths. He has published over 80 peer-reviewed articles, reviews, and book chapters and is also co-author of the critically acclaimed textbook *The Science of Forensic Entomology*. Dr. Rivers' research examines several areas involving necrophagous flies and parasitic wasps as they relate to legal investigations. His current work has been focused on characterization of pattern evidence produced by necrophagous Diptera.



Collection & Preservation of Entomological Evidence

This presentation will discuss how to recognize insect evidence at a crime scene, providing several examples of a range of insects and life stages commonly associated with a death scene. The talk will also provide an overview of the American Board of Forensic Entomology's approved methodologies for collection and preservation of entomological evidence at crime scenes and at autopsy.

Marion Davidson

Confronting Cognitive Bias: Implementing Standards in Forensic Anthropology

Marion Davidson is a biological anthropologist, a PhD candidate in forensic anthropology, and an Assistant Lecturing Professor at Loyola University in the Department of Forensic Science. Her field experience includes work at the University of Tennessee Anthropology Research Facility, as well as with a contractor of the DPAA in the search and recovery of a missing in action WWII soldier in Sicily, Italy.

Marion's research interests include the professionalization of forensic anthropology, the discussion between practitioners and researchers, and the interpretation of forensic evidence.



Confronting Cognitive Bias: Implementing Standards in Forensic Anthropology

Empirical research has established that contextual information has the potential to influence the decisions of forensic examiners in various fields, including applied anthropology.

This presentation will present a background of the published literature on cognitive bias in forensic anthropology, including a recent study and a case example. Some of the current published ANSI/ASB standards will be discussed, as well as additional recommended steps to further improve the reliability of the decision-making process of forensic anthropologists.

Meredith Coon

Not all identification conclusions are equal

Meredith Coon is a certified latent print examiner with Baltimore Police Department. She has been a practitioner for 12 years and has been an adjunct professor for Towson University. Today she will be presenting a statistical model published in Forensic Science International last year.



Not all identification conclusions are equal

This lecture will discuss a statistical model which utilizes examiner conclusions on fingerprint error rate studies to generate a likelihood ratio. When examiner opinions are grouped, they can be used to estimate the strength of a comparison and provide information a juror could use to combine with other facts in a trial.

Jennifer Jeudy

Wellness in Forensic Science

Jennifer (Jenn) Jeudy, a Crime Scene Technician II with the Maryland State Police for over 15 years, is dedicated to enhancing the well-being and mental resilience of law enforcement and forensics professionals. Based in Cumberland, Maryland, she recognized the need for mind-body wellness skills in her field and has been a practitioner for approximately five years and a facilitator for three.

Jenn holds double bachelor's degrees in Criminal Justice and Sociology from High Point University and a master's degree in criminal justice from Villanova University. Beyond her full time position, Jenn actively engages her community by planning and organizing multiple community policing events, fostering positive relationships between law enforcement and the communities they serve. Jenn's passion for sharing her expertise extends to the academic realm as well. She contributes to the development of future criminal justice professionals as an adjunct professor at West Virginia University's Potomac State College. By sharing her knowledge and experiences, Jenn strives to inspire and empower her students to make a meaningful impact in their future careers. Jenn aims to shed light on the importance of mind-body wellness skills in law enforcement and forensics sciences. She firmly believes that integrating these practices can enhance the overall well-being, mental resilience, and job performance of professionals in these fields.



Wellness in Forensic Science

This presentation will focus on introducing mind-body wellness skills to a group of troopers, including soft belly breathing, shaking and dancing, and biofeedback. These techniques have been shown to improve overall well-being, increase emotional regulation, and reduce stress and anxiety levels. By incorporating these practices into their daily routines, attendees can enhance their job performance, remain more focused, and make better decisions.

Through this presentation, attendees will learn about the benefits of these skills and how they can be implemented in their daily lives to enhance their overall physical and mental health. The presentation will emphasize the importance of maintaining a healthy mind-body connection in order to perform at their best, both on and off the job.

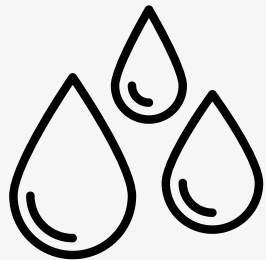
Jennifer Karschner

Workshop: Bloodstain Pattern Recognition and Documentation for Crime Scene Response

Jennifer Karschner began her career as a Forensic Specialist in the Crime Scene Unit in 2007 with the Montgomery County Police Crime Laboratory in Gaithersburg, Maryland. Jennifer was promoted to the position of Technical Leader of the Bloodstain Pattern Analysis Unit in 2013 and Technical Leader of the Crime Scene Unit in 2016. Jennifer currently serves as the Supervisor of the Crime Scene Unit.

Jennifer holds a Bachelor of Arts degree in Animal Sciences and a Master of Science degree in Animal Physiology from Clemson University. She also holds a Master of Science degree in Forensic Science from the University of Florida. Jennifer is certified as a Senior Crime Scene Analyst through the International Association for Identification, the primary Field Training Officer for her unit, and is an adjunct professor at George Washington University in Washington D.C. and the University of Maryland in Rockville, MD. Jennifer is a certified instructor through the Maryland Public Safety and Corrections Training Commission, which allows her to instruct police officers in the field of crime scene and evidence processing.

Jennifer has been a member of the IABPA since 2008. She is also a board member for the Association for Crime Scene Reconstruction (ACSR), and a member of the International Association for Identification and American Academy of Forensic Science.



Workshop: Bloodstain Pattern Recognition and Documentation for Crime Scene Response

Bloodletting injuries are common and present in crime scenes. Being able to properly identify and document associated bloodstain patterns is an essential aspect of the crime scene response. Ensuring the information is correctly documented and preserved will assist and allow for the subsequent analysis by an experienced bloodstain pattern analyst.

This workshop will review the basic bloodstain patterns encountered on crime scenes and provide information for the correct documentation and collection of the patterns. Participants will have the opportunity to participate in pattern identification and hands-on documentation exercises.