

Presentation Topic Suggestions for the 2024 IAI Conference from Science and Practice Chairs

If you are interested in presenting a topic at the upcoming IAI Conference, it might be helpful to review this document for specific discipline program requests. If you would like to contact any of the chairs of program committees, feel free to email Lesley Hammer at hammer.forensics@gmail.com.

Ten Print Identification, Christie VanAndel, Chair

Based on feedback received from this year's IAI conference attendees, next year's conference lectures and workshops should focus on tenprint certification preparation, proficiency testing, and tenprint examiner training programs for onboarding new staff. In addition, we are very interested in hearing about how implementing a new workflow resulted in efficiencies or how a project resulted in better use of staff resources. When appropriate, we ask presenters providing friction ridge-related training to utilize *friction ridge* as opposed to tenprint/latent in the title and description. This small change in the title and description has the potential to greatly increase tenprint examiner conference attendance.

Forensic Photography and Electronic Imaging: Stephanie Hoffman, Chair

PHO is interested in any poster, lecture, and/or workshop submissions focused on the following: crime scene imaging, post-processing techniques, injury and macro photography, High Dynamic Range (HDR) imaging, advanced lighting techniques, panoramic imaging, and photogrammetry. Case studies and research are welcome and encouraged as well.

General Forensics, Ray Jorz, Chair

The General Forensics S&P would like to see lectures and workshops related to the topics of Firearms/Toolmarks.

Latent Print Identification, Mack Brazelle, Chair

The Latent Print Identification (LPI) discipline typically has a large and wide-ranging agenda each year. LPI is always looking for first time speakers and research-based lectures. Other topics we are interested in are backlog reduction, workflow improvements, and latent analysis techniques. If you have any questions about presenting a lecture or workshop, feel free to contact the LPI Chair, Mack Brazelle, directly at mackbrazelle@gmail.com

Biometrics, Bethany Retton, Chair

- Agency Operations. What type of quality controls are being used at booking stations or during latent print searches? How is ACE-V or GYRO being implemented in your organization?
- International Agency Information. What does casework look like internationally? Is interoperability used between different countries/jurisdictions? Is there anything being worked on internationally (i.e., Northern Spirit) that could be shared with the IAI community?
- ABIS Systems. What does case management look like at your agency? How was your system configured? What types of thresholds do you use? If you've recently upgraded your

system, what was your experience? Do you have any advice for other agencies looking to upgrade their system?

- **New Modalities.** Is your agency using, or looking to use the “new” modalities (i.e. iris, voice, gait, DNA)? Do you have any examples of these biometrics being used successfully in a case?
- **ABIS Interoperability.** Are there any real world instances of interoperability playing a role in identification of an individual? If different systems are linked, how is the data managed? Do you have any advice on how to achieve interoperability for other agencies?

Crime Scene Investigation, Michele Smith, Chair

The Crime Scene Investigation (CSI) Science and Practice Subcommittee continues to successfully build a robust educational lecture series at our annual conference. This is in part due to the hard work of the subcommittee members, but more importantly, it is a result of contributions from our fellow IAI members. These members have offered their invaluable insights and experiences so that we all can learn and grow in our profession. We thank our past lecturers and workshop instructors, and we are once again putting out a call for future presenters.

Below are general topics we would like to see in the CSI lecture series:

- Mental Health/Vicarious Trauma
- Officer Involved Shootings
- Mass Fatality Management/Scene Response
- Clandestine Graves
- Using Laser scanners for BPA
- Increased sensitivity of DNA technologies, enhancing PPE/cleaning methods for collection
- Testimony
- Case Studies
- Case Studies on solved Cold Cases

If you have any presentations or workshops related to these topics, or any other topics involving crime scene investigation or processing, please consider submitting an application. Consider sharing “that case” with the larger CSI community, help explain how you incorporated certain methodologies into your workflow, give helpful advice to future leaders of our profession, or share the results of that research project you did. Each of us has something to contribute and what better place to learn from each other than at our annual conference! We look forward to seeing everyone in August!

Digital Media Evidence

DME is always interested in lectures or workshops regarding video analysis, particularly advanced analysis. In particular, DME would like to see lectures and workshops related to advanced techniques in video enhancement, video authenticity, compression methodologies, and freeware. We are also trying to branch out into more fields within DME, including computer and cell phone forensics, large scale data analytics, and audio analysis.

Facial Identification

- “I had a Case” presentation submissions
- More presentation re: the challenges in the Facial Identification field
- Presentations on the disparity in the acceptance of FR outside the US (more international involvement)
- Some joint presentations with the LP and BIS committees re: the impact and effectiveness of “fused” systems (ABIS)
- Ethical Considerations in Biometric Forensics: Balancing Security and Privacy: Discussion on (a) the ethical challenges and implications of using biometric data in forensic investigations, (b) the balance between the need for enhanced security measures and the protection of individuals' privacy rights, (c) the potential risks and ethical guidelines for the responsible use of biometrics in forensic studies and applications.
- Advancements in Biometric Fusion for Enhanced Identification: Discussion on the latest developments in biometric fusion, combining multiple biometric modalities for more robust and accurate forensic identification. Discussion on the potential of combining fingerprint, facial recognition, iris scans, and other biometric data to improve identification accuracy in forensic scenarios.
- Deep Learning Applications in Biometric / Forensics Applications: Examples and Studies of deep learning techniques in biometric / forensic applications and real cases. ChatGPT and the future of AI in biometrics / forensic applications.
- Biometric Forensics in Cybersecurity: Role of biometrics in securing digital identities and investigate emerging threats and countermeasures in the cyber forensics landscape.
- Biometric Spoofing Attacks: Techniques and Countermeasures; Techniques used in biometric spoofing attacks and their potential impact on forensic investigations; State-of-the-art countermeasures to detect and prevent biometric spoofing, emphasizing the importance of securing biometric systems against fraudulent attempts.