ILLINOIS FORENSIC SCIENCE COMMISSION
STATEMENT ON THE USE OF ARTIFICIAL INTELLIGENCE (AI)
IN FORENSIC SCIENCE

The Illinois Forensic Science Commission recognizes the American Society of Crime Laboratory Directors' (ASCLD) September 30, 2025 Position Statement on the Use of Artificial Intelligence (AI) in Forensic Science as a resource for forensic laboratories exploring the possible integration of AI technologies into forensic science workflows.

The ASCLD Statement supports the use of AI in forensic science when applied in a manner that is (1) complementary, not substitutive; (2) scientifically validated; (3) ethically applied; (4) governed by policy and oversight; and (5) supportive of transparency and reproducibility.

From December of 2024 through October of 2025, the Technology Subcommittee of the Illinois Forensic Science Commission hosted open and robust discussions on the topic of AI applications in forensic science which included input from practitioners in the core forensic science disciplines, presentations from subject matter experts, and the sharing of resources from conferences and publications. The Technology Subcommittee's key takeaways from its work related to the use of AI in forensic science align with ASCLD's position statement on the use of AI in forensic science.

The Illinois Forensic Science Commission joins ASCLD in encouraging "collaboration among laboratories, academic partners, technology developers, and legal stakeholders to ensure the responsible advancement of AI in support of justice." The Commission will continue to monitor developments related to the use of AI in forensic science and to serve as a forum for diverse stakeholder engagement on this important and evolving topic.

The Illinois Forensic Science Commission was established in 2021 by the Illinois General Assembly under Public Act 102-523. Members of the Forensic Science Commission include crime lab directors, forensic scientists, law enforcement officials, attorneys with experience in the use of forensic evidence in criminal cases (judicial, prosecutorial, and defense), a member of academia with experience in forensic science, a medical examiner, and community representatives. 20 ILCS 2605/2605-615(a) outlines the purpose and duties of the Illinois Forensic Science Commission. Consistent with its statutory charge, the Commission voted on March 11, 2026 to issue this Statement as a resource for forensic science stakeholders in Illinois.

Approved: March 11, 2026

AMERICAN SOCIETY OF
CRIME LABORATORY DIRECTORS, INC.®

65 Glen Road, Suite 123, Garner, NC 27529

September 30, 2025

ASCLD Position Statement on the Use of Artificial Intelligence (AI) in Forensic Science

The American Society of Crime Laboratory Directors (ASCLD) is a nonprofit professional society of over 700 forensic laboratory directors, managers and leaders across the United States and worldwide, dedicated to providing excellence in forensic science through leadership and innovation. The purpose of the organization is to foster professional interests, assist the development of laboratory management principles and techniques; acquire, preserve and disseminate forensic-based information; maintain and improve communications among forensic laboratory directors; and promote, encourage and maintain the highest standards of practice in the field.

Purpose

ASCLD supports the responsible exploration, validation, and integration of Artificial Intelligence (AI) technologies into forensic science workflows. When appropriately implemented, AI has the potential to enhance the accuracy, efficiency, consistency, and reproducibility of administrative operations, case triage, and eventually forensic analyses. ASCLD recently established an initial set of AI "Use Cases" for using AI to solve various forensic science management pain points. ASCLD encourages its membership to work with stakeholders and partners to pursue these AI "Use Cases", as well as to develop additional "Use Cases" of their own. To that end, ASCLD presents this position statement in an effort to summarize guiding principles that need to be considered by the forensic science community when pursuing AI solutions.

Background

AI technologies, including machine learning, deep learning, natural language processing, computer vision, and predictive analytics are increasingly being applied across many disciplines that are directly applicable to forensic science. These tools may assist in evidence prioritization, documentation automation, case management, analyst training, image comparison, and data interpretation. As forensic laboratories face increasing caseloads and resource constraints, AI offers

a promising avenue to optimize operations while maintaining scientific integrity and quality.

Position

ASCLD supports the use of Artificial Intelligence in forensic science when applied in a manner that is:

- **Complementary, Not Substitutive:** AI should be viewed as a tool to augment the capabilities of trained forensic professionals—not as a replacement. Human expertise remains critical in complex reasoning, contextual evaluation, and courtroom testimony. A structured change-management and training plan should accompany any AI deployment to ensure staff maintain critical interpretive skills and can detect automation errors.

- **Scientifically Validated:** AI systems must undergo rigorous validation to ensure that results are accurate, reliable, and appropriate for their intended use. Validation studies must be aligned with established forensic quality standards (e.g., ISO/IEC 17025, ANAB AR 3125, A2LA R221). Further guidance for the integration of AI into laboratory management may be obtained through ISO/IEC 42001.

- **Ethically Applied:** AI must be implemented with attention to ethical considerations, including transparency, fairness, accountability, and avoidance of bias. Human oversight remains essential to interpret results and ensure just outcomes.

- **Governed by Policy and Oversight:** Laboratories should adopt clear policies, procedures, and governance structures for AI deployment, including defined limitations of use, audit trails, and mechanisms for continuous performance monitoring. AI applications must be pursued in an outcome focused manner with a thorough analysis in regard to risk tolerance and how the application will impact all aspects of the criminal justice system.

- **Supportive of Transparency and Reproducibility:** AI outputs must be explainable and defensible in forensic and legal contexts. Users should be able to articulate how results were generated, and systems should allow for reproducibility of findings. AI outputs and their underlying methods must remain discoverable under Daubert or Frye review.

Conclusion

ASCLD recognizes the transformative potential of Artificial Intelligence in forensic science and encourages its adoption as a complimentary tool for use by forensic professionals when guided by scientific rigor, ethical standards, policies, procedures, and operational transparency. ASCLD further encourages collaboration among laboratories, academic partners, technology developers, and legal stakeholders to ensure the responsible advancement of AI in support of justice.

This position statement will be reviewed no later than three years from adoption to incorporate advances in technology, standards, and case law. For further engagement, please contact ASCLD at **executivedirector@ascld.org**.