



The American Society of Crime Laboratory Directors

"Excellence Through Leadership in Forensic Science Management"

ASCLD BOARD POSITION STATEMENT

Rapid DNA – Current Status & Potential for Use in the Field

ASCLD recognizes and supports the development of Rapid DNA devices. In the past 18 months, several vendors have provided demonstrations of prototype devices. The current devices represent an important innovation that promise to deliver a DNA profile in 1-2 hours. Unfortunately, marketing campaigns have over-represented the maturity and capability of these devices. Three areas must be addressed for successful use of these devices in support of criminal investigations: 1) Scientific Validity, 2) Compliance with Best Practices, and 3) Operational Limitations.

Scientific Validity – Peer reviewed scientific studies, not marketing materials should guide the discussion.

- Validations for each type of sample (e.g., reference vs crime scene) is critical. Currently, these devices are suited for use with single-source reference samples (e.g., blood or buccal swabs) limiting usefulness for crime scene samples (e.g., semen from rape kits and trace DNA).
- Protocols and procedures that describe how these devices will be employed in a crime lab or law enforcement environment need to be developed and ideally standardized across the forensic community.
- Trained experts who can correctly interpret results, recognize non-conformities, and troubleshoot technical issues must be involved in the acquisition, deployment, and operation of these devices.

Compliance with Best Practices – SWGDAM compliance and NDIS interoperability are paramount.

- SWGDAM and the FBI Quality Assurance Standards for Forensic DNA Testing Laboratories have provided time honored best practices for DNA testing. ASCLD will look to these groups for guidance with Rapid DNA technologies. Vendors should seek compliance with these standards.
- Interoperability with NDIS is key to maximizing the usefulness of Rapid DNA devices.

Operational Limitations – Both purchase and sustainment costs must be considered.

- The purchase price for most devices is over \$200K. The supply cartridges themselves can exceed hundreds of dollars per DNA sample. This per sample cost does not include maintenance contracts, quality assurance, training, upgrades or the cost of the instrument itself. A careful cost/benefit analysis should be done prior to implementation.
- It is imperative that funding for instruments and/or sample cartridges not compete with current crime laboratory grant funding. Using available crime laboratory federal funding (e.g. Coverdell, DNA Backlog Reduction, or Byrne JAG) to pay for the rapid technology could hinder the progress laboratories have made with increasing their capacity and reducing their backlogs.

ASCLD stands ready to participate in a feasibility study in several jurisdictions across the country (local, state and federal) to assess the Rapid DNA technology and its interface between booking stations and their local crime laboratory. This research could help the forensic community best assess how to integrate this novel technology into their operations. In closing, ASCLD sees the importance of this new technology and the possibilities for the future.

ASCLD Board
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