



*American Academy of Forensic Sciences
American Society of Crime Laboratory Directors
International Association for Identification
International Association of Coroners and Medical Examiners
National Association of Medical Examiners
Society of Forensic Toxicologists/ American Board of Forensic Toxicology*

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The Consortium of Forensic Science Organizations conducted “listening sessions” with its member organizations to determine current resource requirements and gaps that the NIST could assist with. In general, due to the ever-increasing emerging drug crisis combined with other factors, forensic casework and associated backlogs continue to increase dramatically. Compounding this problem, our forensic pathology and forensic science service provider workforce are critically understaffed. Please find our results below:

FUNDING:

1. Continue federal funding for Standards Development Organizations (SDO) to support the SDOs to create and maintain forensic science standards.
 1. NIST and the forensic science community have invested heavily in standards development. The SDO process for vetting and publishing standards is essential for populating consensus-based standards on the NIST OSAC Registry of Standards. Publicly funded forensic science service providers and officers of the court do not have the funding to pay for access to these standards. Federal funding is crucial to the SDO program to allow for the availability of these standards to the forensic science community at no cost.
2. Entities at the Department of Commerce (DOC) are working on the United States infrastructure broadband expansion programs. CFSO respectfully requests NIST provide introductions to the appropriate offices and individuals at DOC working on these broadband programs.
3. Build the capacity of forensic science service providers (laboratory instrumentation, IT equipment, IT infrastructure, IT databases and data sharing networks).
 1. Forensic science service providers, including medical examiner and coroner offices (MEC), do not have adequate laboratory information management systems (LIMS) and case management systems (CMS) for capturing information, gathering information from instrumentation, or communicating information with other stakeholder data systems in the criminal justice system. Funding is needed to improve the systems themselves and allow more publicly funded forensic providers to obtain the systems to improve the timeliness of cause and manner of death determinations, address laboratory turnaround times, and enhance surveillance reporting on the prevalence of emerging drugs and causes of death (e.g., COVID-19).
 2. The NIJ sponsored FLN-TWG and CDC/NIJ sponsored MDI-DATA-WG are issuing reports on needed LIMS/CMS improvements, data sharing, systems integration, and networking considerations. The recommendations of these federal working groups need to be implemented to achieve success regarding this issue.
4. Develop fiscal estimates for each OSAC Registry standard to be implemented and based upon the estimates, provide the funding for forensic science service providers to implement OSAC Registry standards.
 1. Forensic science service providers and MEC offices are overwhelmed and presently under resourced to implement the standards being placed on the OSAC Registry. These resources include quality, technical, and operational personnel, instrumentation, physical facilities, advanced imaging equipment, reagents, and consumables. Forensic providers need to have reliable implementation estimates to secure resources from funding entities.

RESEARCH:

1. Add valuable areas of research such as:
 1. Detection and identification of emerging drugs.
 1. Forensic science service providers do not have research laboratories to evaluate the chemical properties and pharmacological mechanisms of emerging drugs. NIST programs such as the TRANQ program need to be funded and enhanced.
 2. NIST programs such as the CannaQAP program that provide forensic science standard reference materials for public laboratory validation studies, interlaboratory comparisons, and other quality assurance purposes need to be funded and enhanced for emerging drugs.
 2. Statistics in pattern disciplines (LP, Shoe/Tire, Firearms) with real implementations.
 1. Efforts must be focused on development of court ready solutions for communicating the certainty and significance of conclusions in pattern disciplines. If likelihood ratios or other statistical methods cannot be attained and implemented in pattern disciplines, that information must be clearly communicated to the courts and viable solutions must be developed.

OPERATION:

1. Make chemical standards available to the forensic science community for emerging drugs.
 1. NIST programs such as the CannaQAP program that provide forensic science standard reference materials for public laboratory validation studies, interlaboratory comparisons, analyst training programs, and other quality assurance purposes need to be funded and enhanced for emerging drugs.
2. Provide more quality assurance chemical standards for new technology validations and blind proficiency reference materials for forensic disciplines.
 1. NIST programs such as the CannaQAP, standard bullet, human DNA quantitation and profiling, ethanol, and other programs that provide forensic science Standard Reference Materials (SRM) for public laboratory validation studies, material identification, interlaboratory comparisons, analyst training, blind proficiency testing, and other quality assurance purposes need to be funded and enhanced for all forensic disciplines.
3. Resolve the ongoing problems with interoperability-among identification systems such as the Automated Biometric Identification System (ABIS).
 1. Federal leadership is needed in developing a strategic plan for a single national fingerprint database that is searchable by all public forensic science providers. Until this system can be strategically planned, designed, funded, and implemented, NIST should move forward with plans to develop more interoperable regional solutions or cooperatives by funding and overseeing beta test sites.
4. Assist with technology implementation and validation criteria.
 1. Federal agency participation is needed in the plans for interlaboratory validations and implementation of new instruments and technology such as:
 1. 3D Firearm Imaging
 2. Rapid field analysis of solid dose drugs and toxicology rapid screening for field and medical examiner and coroner purposes (i.e., THC, fentanyl, emerging drugs)
 3. Proteomics
 2. Federal leadership is needed to convene a working group to develop best practices and standards for the proper use of Advanced Imaging (Computerized Tomography or CT) in medical examiner and coroner offices to determine proper use in the pathology workflow including functionality for improving efficiency and potentially decreasing the needs for forensic autopsy.