Dear Colleagues,

One of the great challenges to providing a forensic science service is determining how to provide the best service with the resources we have at hand. Like most government services, we are given a fixed amount of resources, and it is our challenge to do the best we can with them. In an ideal world, we would measure the job that is to be done and provide the resources to do that job. As forensic technology and the use of databases (CODIS, NIBIN, AFIS) has permitted us to develop suspects where there were none previously, crime labs have moved from identifying items and providing associative evidence to providing primary investigative leads. Increasing demand for forensic services has outstripped our ability to provide it, resulting in backlogs, without resources to match that demand with supply.

In the Foresight Project at West Virginia University, Dr. Paul Speaker is doing a remarkable job in compiling crime laboratory data (http://business.wvu.edu/centers/forensic-business-studies/foresight), and also in analyzing the trends found in that data. He has determined that the elasticity of crime lab demand is negative 1.1. What that means is when we get one case done to chip away at our backlog, 1.1 cases come in. That is like a pile of sand representing cases, where you dig out one case at the bottom, and another case plus 10% more pours in. That tells us we are not even close to the number of cases that need the benefit of forensic analysis, the pile out there is just that big.

This sand pile analogy is an apt metaphor for the backlog of untested sexual assault cases. Many states’ legislators have determined that all cases should be submitted to the crime lab. It is difficult to argue that when a survivor of an alleged sexual assault lodges a complaint, goes through the additional ordeal of a sexual assault medical examination, that their sexual assault kit should not be analyzed at a crime lab. In those states which have mandated all sexual assault cases be examined, there have been 70 to 150 % increases in case submissions and above. Some have asked if mandating submissions to the crime lab takes discretion away from law enforcement. An investigator with a crime lab report is better than one without. With forensic analysis information, that investigator will be in a better position to make improved decisions for the case they are investigating.

A unique thing happens when there is a distinct job that needs to be done, such as provide forensic analysis for all the untested sexual assault cases. With that mandate come the opportunity to ask for what is needed to get it done. These cases should all be analyzed forensically using best practices such as those proposed in the recent NIJ report (https://www.ncjrs.gov/pdffiles1/ncjrs/250384.pdf). Survivors demand it. Law enforcement is better with it. It is up to us to justify and obtain the resources to conduct those case analyses properly and in a timely manner. Then we have the privilege of rolling up our sleeves and getting it done. There is no nobler calling than supporting survivors, our investigators, public safety and the wrongfully accused with objective data driven evidence.

Ray Wickenheiser
President

Be sure to stay up-to-date with our 2017-18 National Priorities and Agenda!

Our NEW mailing address: 65 Glen Road, Suite 123, Garner, NC 27529
Call for expert(s) for WG 4 Analysis and interpretation and WG 5 Reporting to develop working drafts (WD) for ISO 21043-3, 21043-4, 21043-5

Forensic Analysis: Part 3: Analysis and examination of material
Part 4: Interpretation and ISO 21043.5
Part 5: Recording.

Expert forensic scientists with experience at analysis and interpretation of forensic evidence are required to participate in both working groups. Such experience should be in qualitative and/or quantitative disciplines where the derived data or extracted features are interpreted to support a reported conclusion.

- The experts should have experience in the use of databases or other reference materials for classification, identification and/or statistical analysis.
- The experts should have experience in reporting results and reviewing the reports of peers including assessing the validity of conclusions.

Examples of relevant areas of expertise include DNA, Toxicology, Pathology, Chemical Criminalistics, Ballistics, Fingerprints, Documents, etc.

For more information, contact Erin Forry erin.forry@ascld.org

Looking for a new opportunity?

- **Trainee – Controlled Substances**, LVMPD, Las Vegas, NV, Expires: September 27, 2017
- **Forensic Scientist I**, LVMPD, Las Vegas, NV, Expires: September 27, 2017
- **Forensic Scientist II – Controlled Substances**, LVMPD, Las Vegas, NV, Expires: September 27, 2017
- **Forensic Scientist III**, City of Phoenix, Phoenix, AZ, Expires: November 28, 2017
- **Forensic Scientist IV**, City of Phoenix, Phoenix, AZ, Expires: November 28, 2017
- **Forensic Scientist II**, City of Phoenix, Phoenix, AZ, Expires: November 28, 2017
- **Forensic Examiner DNA 3 (#01377)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **Forensic Examiner DNA 1 (#01376)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **Forensic Examiner Latent Print 1 (#01375)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **Forensic Examiner Latent Print 3 (#01374)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **Forensic Chemist (#01373)**, ORAU, Oak Ridge, Expires: December 31, 2017
- **Laboratory Manager/Theater Liaison (#01365)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **Laboratory Manager/Theater Liaison**, MISS, Oak Ridge, Expires: December 31, 2017
- **Forensic Examiner – Firearms & Toolmarks (#01378)**, ORAU, Ft. Gillem, GA (& OCONUS), Expires: December 31, 2017
- **NIBIN Technician**, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017
- **Forensic Scientist IV**, City of Phoenix, Phoenix, AZ, Expires: November 22, 2017
- **Forensic Scientist III**, City of Phoenix, Phoenix, AZ, Expires: November 22, 2017
- **Forensic Scientist II**, City of Phoenix, Phoenix, AZ, Expires: November 22, 2017
- **Crime Laboratory Manager**, Division of Police, Columbus, OH, Columbus, OH, Expires: September 28, 2017
- **Quality Assurance Manager**, Kansas Bureau of Investigation, Topeka, KS, Expires: September 10, 2017
- **Forensic Scientist – Latent Print Examiner**, DuPage County Forensic Science Center, Wheaton, IL, Expires: September 22, 2017
- **Crime Lab Director**, Office Of Attorney General, Bismarck, ND, Expires: November 30, 2017
- **Forensic Scientist I-Firearms/Toolmarks/Ballistics**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist II-Firearms/Toolmarks/Ballistics**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist III-Firearms/Toolmarks/Ballistics**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist IV-Firearms/Toolmarks/Ballistics**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist I-Trace Evidence**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist I-Trace Evidence**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
Keeping evidence safe during weather events

Recently we appear to experience a weather event weekly. High winds from hurricanes, flood ravaged waters from dam releases, and unstable infrastructure from earthquakes are all issues plaguing us at this time. Keeping our evidence safe has become a top priority for many departments.

During a catastrophic event, moving the evidence to a secure location is the most desirable situation. In the event you need to move evidence, do not forget that if a secure facility elsewhere is not available, a portable facility could be the answer. Moving the evidence to a portable container that could be moved to a more secure location works as well as having another facility.

But what about those who cannot move the evidence, there is certainly the ability to place items on higher floors in the building, or at the least on higher shelves. But once power has been cut what does a lab do about heating and cooling? We know that evidence and property rooms require specialized environments. Wet conditions are an obvious factor, but ventilation, temperature, and humidity are just as important. In 2001, the California Attorney General's Office put out recommendations on post-conviction testing of evidence. It was recommended that in order to maintain the possibility of successful DNA testing with techniques currently in use, evidence containing biological material: Should be stored in a dried condition, stored frozen, under cold/dry conditions, or in a controlled room temperature environment with little fluctuation in either temperature or humidity, and should not be subjected
to repeated thawing or freezing.

Even with a state-of-the-art heating and cooling system, heavy rains usually create problems with power grids. But what happens when the backup generator does not work as expected? An emergency or temporary climate control system may be in order. Generators are usually in place for safety and life issues. But, evidence and property rooms may need proper heating, cooling, and ventilation. Finding a vendor before a weather event occurs is the key.

Looking for a towable diesel generator to rent may the way to go. Choosing the size of the generator is important. You want to be able to restore HVAC to your facility during down time. It is recommended you choose a generator that matches your incoming voltage. It may be too late for current weather activities, but planning for future events should be a top priority. Have a plan in place. One for evacuation for foreseen major events and one for the unforeseen.

For more information:
Crime Lab Report’s recent article on this issue
http://www.science20.com/john_collins/hurricane_harvey_and_the_risk_to_criminal_evidence-225590

New York Times article from 2013 that is still relevant today

October 23-26, 2017, Fort Worth, TX

**Forensic ISO/IEC 17025 Assessor Training (Testing)**
September 25-29, 2017, Honolulu, HI (course full)
October 16-20, 2017, Hillsboro, OR
November 13-17, 2017, Emeryville, CA

**Forensic ISO/IEC 17025 Preparation (Testing)**
September 25-27, 2017, Honolulu, HI
October 16-18, 2017, Hillsboro, OR
November 13-15, 2017, Emeryville, CA

**Forensic Measurement Confidence (Web-based)**
October 4-6, 2017

**Root Cause Analysis for Forensic Service Providers (Web-based)**
October 3-5, 2017

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**Recorded Training:**

**Episode 9 Podcast!!**
Just Blood Spatter

In episode nine of Just Science, funded by the National Institute of Justice's Forensic Technology Center of Excellence [Award 2016-MU-BX-K110], we spoke with Dr. Marc Smith, from the Georgia Institute of Technology. Dr. Smith's NIJ funded research in blood spatter has connected computational fluid dynamics with empirical studies to improve the understanding of blood spatter onto solid, slanted surfaces. His work looks at many variables, including droplet size, speed, surface roughness and wettability. Listen and Subscribe [HERE](https://mailchi.mp/bd2d1d1f3e/rvfrbk1gg9-1182405).

Subscribe to the channel at:
- Google Play
- iTunes
- Stitcher
- Soundcloud

**ASCLD/RTI Backlog Series**

Archival versions of the ASCLD/RTI Backlog Series can be found at the following links:
- The Paradox of Backlog Reduction – How Doing Less Can Be Doing More
- Taking the First Steps Toward Backlog Reduction
- Managing Customer Expectations and Education
- How to Increase your Staff without Increasing Budget
- Efficiency Improvements
- Developing a Statewide Approach to Backlog Management
- Case Acceptance Policies and Guidelines

**ASCLD/RTI Rapid DNA Series**

Archival versions of the ASCLD/RTI Rapid DNA Series can be found at the following links:
- Rapid DNA: The QAS and NDIS
- Rapid DNA: Arizona DPS and Richland County, SC
- Rapid DNA: Booking Stations and CODIS

**ASCLD /RTI DNA Standards and Guidelines Webinar Series**

SWGDAM Interpretational Guidelines


Proposed Quality Assurance Standards (QAS) changes


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2018 National Institute of Justice Forensic Science Symposium

NIST has published a request for information on OSAC 2.0. Comment is open [until October 30, 2017](https://www.federalregister.gov/documents/2017/08/30/2017-18355/request-for-information-on-the-development-of-the-organization-of-scientific-area-committees-osac).
Forensic Science in the News

Chaotic scene at Forensic Science Centre*
The atmosphere at the Forensic Science Centre in Federation Park on Monday was one of anger and frustration as already grieving relatives were forced to wait for autopsies to be done due to a series of unfortunate events.

State Crime Lab Caseload Climbs with Violent Deaths
With almost 70 homicides in Pulaski County alone this year, and just under 300 across the state, the Arkansas State Crime Lab has been busy. Lab officials say they're expecting to perform close to 200 more autopsies this year than last.

State crime lab struggles with increased workload
Technicians at the state crime labs are struggling to keep up with a jump in evidence that needs testing.

Surge in crime lab evidence prompts new hires, overtime boost
Schimel said he will add five part-time positions to a state team that helps local agencies collect evidence from large crime scenes and in complex cases such as police shootings. When team members currently assist local agencies, they are taken away from testing other crime evidence.

Probe launched after crime lab withheld breathalyzer records
The Baker administration is launching an internal investigation into a state crime lab office that is accused of withholding hundreds of pages of records showing problems with the machine used by police all over the state to measure a driver's level of intoxication.

State Crime Lab reduces wait times for evidence analysis
With the implementation of process improvements, the Arizona Department of Public Safety's State Crime Lab has reduced turnaround times for analysis in three key areas over the past two-and-a-half years.

GBI Crime Lab Identifies Counterfeit Pills in Houston & Bibb Counties
Analysis has confirmed that pills from Houston and Bibb counties contain cyclopropyl fentanyl. Cyclopropyl fentanyl is a fentanyl analogue that is chemically similar to fentanyl. It is unknown how the human body will react to this drug since it is not intended for human or veterinary use. Cyclopropyl fentanyl had previously been identified for the first time by the GBI Crime Lab in June 2017 during the Middle, GA overdose outbreak incident.

WV Supreme Court to hear appeal in '87 Cabell slaying
The West Virginia Supreme Court of Appeals has agreed to hear arguments surrounding a Cabell County judge’s ruling overturning a 1987 murder conviction due to the testimony of disgraced State Police serologist Fred Zain.

FBI and NamUs Partnership IDs Victims, Killers, Unknown Nationwide
…the breakthrough was made through a new partnership in 2017 between the FBI and the National Missing and Unidentified Persons System, or NamUs. The pilot program began in February with a massive backlog of prints which had never before been examined by the FBI. Since then, a steady stream of "hits" from the unidentified deceased have produced hundreds of names, faces—and leads. What began as a pilot program in February has already transitioned into the normal workday routine for the some 35 FBI fingerprint examiners—although the results have proven to be anything but routine.

Identification of Individuals by Trait Prediction Using Whole-genome Sequencing Data
For the IRB approved study, 1,061 ethnically diverse people ranging in age from 18 to 82 participated by having their genomes sequenced to an average depth of at least 30x. Researchers also collected phenotype data in the form of 3-D facial images, voice samples, eye and skin color, age, height, and weight.

Reasonable Uncertainty: The Limits and Expectations of an Expert's Testimony
Courts require experts to testify “within reasonable scientific certainty.” Sounds legit, right? It isn’t—not to scientists.
New Narcotics Protection Kit as You Face the Dangerous Opioid Epidemic

We designed this single-use kit following DEA & CDC guidelines

Small amounts of Fentanyl can cause an overdose, a significant threat to you & your department. We designed this kit to help you stay safe.

Buy Now

http://www.sirchie.com/nark-ppe-kit-available-in-med-large-x-large-2xl.html#.WaNzc-mQxPb

August 2017 Newsletter

OSAC Subcommittees
https://www.nist.gov/topics/forensic-science/osac-subcommittees
The American Society of Crime Laboratory Directors (ASCLD) has received funding from the Laura and John Arnold Foundation to develop software that will transfer data from forensic Laboratory Information Management Systems (LIMS) to FORESIGHT, a business quantitative process tailored to forensic laboratories.

The goal of the project, called FORESIGHT 20/20, will be to allow laboratories to easily upload business-relevant information from their individual LIMS to the FORESIGHT project, hosted at West Virginia University.

Software development and installations for JusticeTrax Alpha labs is progressing. The software

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ASCLD Crime Lab Minute September 11, 2017

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Bode Cellmark Forensics provides advanced forensic solutions offering crime labs ways to reduce their workloads and budgets.

Bode's newest offerings include: Sexual Assault Kit Backlog Reduction Program streamlines processes to eliminate backlogs of untested sexual assault kits. Bode Buccal 2™ is uniquely designed to improve DNA databanking collecting and automate processing. The Bode Buccal 2 is a DIRECT COLLECTION SYSTEM that requires minimal training. There is NO Transfer Step Required. Independent Validation Services are customized to meet your laboratory’s needs. Validation services provide completely unbiased analysis on your equipment, chemistries, or process.

Establishment of an Office of Forensic Sciences and a Forensic Science Board Within the Department of Justice

Revision 2/14/17


Formed in 2000, CFSo is an association of six forensic science professional organizations: American Academy of Forensic Sciences; American Society of Crime Lab Directors; International Association for Identification; International Association of Forensic Nurses; National Association of Medical Examiners; and Society of Forensic Toxicologists - American Board of Forensic Toxicology. These professional organizations together represent more than 21,000 forensic science professionals across the United States.

Read the CFSo Newsletter here.

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Grant Assistance for DNA

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Evidence Technology Magazine

http://www.evidencemagazine.com

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Genetics in Forensics Congress

Oxford Global Conferences: www.oxfordglobal.co.uk
Oxford Global Training Seminars: www.oxfordglobaltraining.co.uk

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Bode Cellmark Forensics
LabCorp Specialty Testing Group

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Forensic Science Policy and Management: An International Journal
http://www.tandfonline.com/toc/ufpm20/current

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Grant Assistance for DNA

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provides a dashboard of the labs' own stats and FORESIGHT stats, among other information. The information, formatting, and interface may vary somewhat by vendor.
Next Generation Identification, along with enhanced processing protocols, is improving the odds of identification. Identifications are increasing even with poor quality prints or with those that have been searched in the past.

The National Institute of Justice recently released a report on National Best Practices for Sexual Assault Kits: A Multidisciplinary Approach in response to the Sexual Assault Forensic Evidence Reporting (SAFER) Act of 2013, which focuses on the accurate, timely, and effective collection and processing of DNA evidence in sexual assault investigations. A practitioner working group developed 35 recommendations that provide a roadmap for collecting, transferring, preserving, storing and analyzing sexual assault kits. The recommendations apply to medical professionals, members of law enforcement, victim advocates, prosecutors and laboratories. A coordinated, collaborative and multidisciplinary approach to sexual assault investigations helps reassure and support victims of sexual violence, encourages victim engagement and increases the potential for just legal resolutions.

The Fingerprint Sourcebook is Now Available in Spanish
NIJ has released a Spanish-language version of The Fingerprint Sourcebook, which aims to be the definitive resource on the science of fingerprint identification. The Sourcebook was prepared by the International Association for Identification and topics covered include the anatomy and physiology of friction ridge skin; techniques for recording exemplars from both living and deceased subjects; AFIS; latent print development, preservation and documentation; equipment and laboratory quality assurance; perceptual, cognitive and psychological factors in expert identifications; and legal issues.

Forensic Identification Using Individual Chemical Signatures
NIJ-funded researchers developed an approach to translate chemical signatures recovered from personal objects such as phones into a lifestyle sketch of the owner, using mass spectrometry and informatics approaches.

Quantifying Error Rates for the Measurement of Human Skeletal Remains
NIJ-funded researchers revised forensic anthropology procedures to include an “error metric” for the measurement of human skeletal remains. This article summarizes findings from that study.

Designing Methods to Identify Evolving Designer Drugs
This article describes an NIJ-supported research project focused on issues of resolution and discriminatory capabilities needed to increase the reliability and selectivity of forensic evidence and analytical data for new bath salt-type drugs of abuse.

Standardized Process Developed for Identifying Dyes in Fibers
This article summarizes method with the twofold purpose of producing a novel, reliable, and useful microfluidic system for fabric dye extraction and increasing the knowledge needed to guide criminal justice policy and practice related to the forensic analysis of dyed fabric.

The Most Important Features for an Effective Sexual Assault Response Team
Sexual Assault Response Teams (SART) hold the promise of improving victim experiences, increasing prosecution rates, and reducing the prevalence of sexual assault. To understand how an effective SART works, NIJ-funded researchers studied the structure and operations of SARTS across the United States.

Identifying Ignitable Liquids in the Aftermath of A Fire
In a wide-ranging analysis of the effects of weathering and biological degradation on ignitable liquids, NIJ-supported researchers at the University of Central Florida's National Center for Forensic Science studied and classified 50 liquids in the Ignitable Liquids Reference Collection database.

Scale Modeling in Fire Reconstruction
After reviewing scaling theory used in fire research, this project developed scaling rules for design fires and enclosure material boundaries, followed by the full-scale testing of a gas burner, heptane pool fire, pine wood crib, and polyurethane foam, and the scaling theory was applied to the full-scale scenario and a 1/8 scale compartment.

Evaluation of the Use of a Non-Contact 3D Scanner for Collecting Postmortem Fingerprints
Historically, the recording of postmortem fingerprint impressions from decedents is a manual and labor-intensive process. 3D scanners are potentially an important tool to help forensic scientists address the challenges of postmortem fingerprint recovery due to the contactless scanning capabilities, as well as the ability to scan complex surfaces and capture scale. This NIJ-supported study evaluated the potential for using a contactless, 3D fingerprint scanner to capture examination-quality postmortem fingerprints and facilitate rapid identification of the deceased.

Evidential Value of Particle Combination Profiles on Common Items of Evidence
This project used the analytical tools and statistical methods developed in previous research funded by NIJ to measure the evidential value of very small particle (VSP) profiles found on four common types of physical evidence: handguns, cell phones, drug packaging, and ski masks.

Method Development and Validation of Toolmark Imaging, Virtual Casing Comparison, and In-Lab Verification using a GelSight-Based Three Dimensional Imaging and Analysis
Stemming from a previous project that developed a 3D surface topography imaging and analysis system for casings based on the GelSight scanning technology and custom feature-based image comparison, this NIJ-supported project aimed 1) to develop the ability to scan and compare firing pin impressions; 2) to examine the use of the imaging and analysis technology in a live lab experiment; and 3) to investigate Virtual Microscopy, the use of measured 3D surface topographics as a substitute for physical casings.