Dear Colleagues,

I am very excited to announce the official opening of the website for our 45th Annual ASCLD Symposium, which will be held in Atlanta, Georgia from May 20 – 24. The conference link is: http://www.ascldsymposium.com/

This year’s symposium focuses on Leadership. Our planning committee chaired by Matthew Gamette has been very busy working on a program which will provide current and innovative content and networking opportunities for you to improve your forensic operation. Within the topic of Leadership, there will be sessions on Visionary Leadership, Emerging issues including Technology Implementation and Policy in Action, HR/Personnel Performance, Business Metrics and Operations, Networking and History.

In keeping with our traditional format, the first two days will provide half and full day workshops on a variety of topics related to the leadership theme, providing hands on and interactive opportunities to instill learning from world leading speakers. Accommodation is at the majestic Atlanta Marriott Marquis hotel in the heart of downtown Atlanta. Sci Fi fans will marvel at the 40 plus story interior atrium ringed with rooms around the exterior, making for a spectacular interior view all the way around and down, including glass walled elevators (all at the government rate).

Please join us in Atlanta to share experiences and gain valuable insights to lift our operations. See you there!

Ray Wickenheiser
ASCLD 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

Looking for a new opportunity?

- **Firearms and Tool Marks Researcher (Public Health Laboratory Scientist Developmental I) – GRANT**, Maryland State Police Forensic Sciences Division, Pikesville, , Maryland, Expires: October 7, 2017
- **Firearms & Toolmarks Section Supervisor**, Virginia Dept. of Forensic Science, Manassas, VA, Expires: October 18, 2017
- **Assistant/Associate Professor of Forensic Science**, Sam Houston State University, Huntsville, TX, Expires: December 31, 2017
- **Criminalist I FingerPrint Examiner**, University of Rhode Island State Crime Laboratory, Kingston, RI, Expires: October 13, 2017
- **Latent Fingerprint Examiner**, Hennepin County Sheriff's Office Crime Laboratory, Downtown Minneapolis, MN., Expires: September 28, 2017
- **Director, Forensic Science & Law Program, Duquesne University**, Duquesne University, Pittsburgh, PA, Expires: December 8, 2017
- **Assistant /Associate Professor – Forensic Science M.S. Program, Digital Evidence Emphasis**, Marshall University, Huntington, Expires: December 12, 2017
- **Forensic Coordinator, Assistant Professor**, Texas A&M University-Corpus Christi, Corpus Christi, TX, Expires: December 1, 2017
- **Assistant Professor – Forensic Chemistry**, Southeast Missouri State University, Cape Girardeau, MO, Expires: October 19, 2017
- **Quality Assurance Manager**, Douglas County Sheriff's Office, Forensic Services Division, Omaha, NE, Omaha, NE, Expires: October 19, 2017
- **Forensic Scientist II – Toxicology**, Las Vegas Metropolitan Police Department, Las Vegas, NV, Expires: September 27, 2017
- **Forensic Scientist I – Toxicology**, Las Vegas Metropolitan Police Department, Las Vegas, NV, Expires: September 27, 2017
- **Crime Lab Unit Manager (Forensic Biology/DNA)**, Broward County Sheriff's Office, Fort Lauderdale, Florida, Expires: November 3, 2017
- **Crime Lab Scientist – Toxicologist**, Georgia Bureau of Investigation, Augusta, Expires: September 27, 2017
- **Senior Scientific Advisor**, Texas Forensic Science Commission, Austin, TX, Expires: December 5, 2017
- **Forensic Scientist 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 IV**, City of Phoenix, Phoenix, AZ, Expires: November 28, 2017
- **Forensic Scientist III**, 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
- **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
- **Forensic Scientist II-Trace Evidence**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist III-Trace Evidence**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist IV-Trace Evidence**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist Trainee-Chemistry/Controlled Substances**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist Trainee-Firearms/Toolmarks/Ballistics**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist Trainee-Latent Prints**, Nassau County Medical Examiner Division of Forensic Services, East Meadow, NY, Expires: February 2, 2018
- **Forensic Scientist Trainee-Trace Evidence**, Nassau County Medical Examiner, East Meadow, NY, Expires: February 2, 2018
- **Forensic Analyst – Toxicology**, Houston Forensic Science Center, Houston, TX, Expires: October 13, 2017
- **Forensic Serologist**, Sorenson Forensics, Salt Lake City, Expires: September 29, 2017
- **Forensic DNA Technician**, Sorenson Forensics, Salt Lake City, Expires: September 29, 2017
- **Forensic DNA Analyst I / II**, Sorenson Forensics, Salt Lake City, Expires: September 29, 2017
- **Quality Specialist**, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017
- **Forensic Analyst – Biology/DNA**, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017
- **Crime Scene Supervisor**, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017
OSHA regulations and Crime Labs

State employees do not always receive the same worker safety guarantees as those in the private sector. Federal OSHA regulations are for private sector employees and therefore, may not cover employees in many crime labs throughout the country. Richard E. Fairfax, Director, Directorate of Enforcement Programs in a standard interpretation states:

Please be advised that Federal OSHA neither has regulations, nor jurisdiction, over State, municipal, or volunteer fire departments. Section (3)(5) of the Occupational Safety and Health Act of 1970 specifically excludes Federal OSHA’s authority over employees of State and local government. The Act provides for States to assume responsibility for occupational safety and health programs under the State's own plan, which must be approved by the U.S. Department of Labor. Each State-plan must include coverage of public employees of the State, and it must be “at least as effective” as Federal OSHA’s protection of private sector employees.¹

All states must have a program in place, but the governance of the program is sometimes overlooked. Section 18 of the Occupational Safety and Health Act of 1970 (Federal OSHA), sets regulations and rules on how individual states may administer their job safety and health programs (State Plans), with the requirement that they meet minimum federal requirements. Currently, there are 22 states and jurisdictions that administer State Plans covering both public and private sector employees. Five states administer State Plans covering only public sector employees. These State Plans may operate because Federal OSHA approved them as being “at least as effective” as the Federal OSHA program.²

Whether you have a program or not, following the OSHA standards is the minimum requirement for the health and safety of your employees. To help labs understand safety issues they may encounter in the lab, OSHA’s Laboratory Safety Guidance is a great place to start. When writing your Health and Safety plans, include the guide as a reference.³ When following ISO 17020 or 17025 standards, many of the details needed for a health and safety program are discussed in the guide including the necessity for a safety officer/chemical hygiene officer. Also, know if your state has a plan and are there more stringent guidelines that must be followed.

Safety is sometimes overlooked. The expectation is that employees will follow the practices set forth and use good judgment. That isn’t always the case. There still exists the need to review policies on a continual basis and update when needed. Having safety meetings on a frequent basis rather than once a year where old issues are addressed is not conducive to safety in the lab. Meet more frequently and find a topic to discuss. Use the meetings for training in safety issues or related health concerns. Do you have Narcan or an AED defibrillator onsite where training should be kept up to date? What about fire extinguisher safety or CPR training? Keep safety relevant for your employees so that an emergency doesn’t become a catastrophe. For continued information on lab safety, look for the next installment, How to Write a Chemical Hygiene Plan, in the next couple weeks.

¹ To read full standard interpretation here: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=25539

² To see if your state has a state plan: https://www.osha.gov/dcsp/osp/statestandards.html

³ OSHA's Overview for Laboratory Workers, in particular, look at the Laboratory Safety Guidance under Highlights: https://www.osha.gov/SLTC/laboratories/index.html
TRAINING OPPORTUNITIES

ANAB

Introduction to ISO/IEC 17025
October 1-2, 2017, Riyadh, KSA

Internal Auditing to ISO/IEC 17025
October 3-5, 2017, Riyadh, KSA

ISO/IEC 17025 Lead Assessor Training
October 2-6, 2017, San Antonio, TX
October 8-12, 2017, Riyadh, KSA

Fundamentals of Measurement Uncertainty
November 16-17, 2017, San Francisco, CA

Principles of Internal Auditing and Measurement Uncertainty
November 27-29, 2017, Indian Rocks Beach, FL

Internal Auditing to ISO/IEC 17020
October 17-19, 2017, Alexandria, VA

ISO/IEC 17021-1:2015 Training
October 9-10, 2017, Houston, TX

ISO/IEC 17020 and Audit Preparation for Forensic Agencies
November 2-3, 2017, Alexandria, VA

Forensic ISO/IEC 17025 Internal Auditor
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

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.

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


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.


Forensic Science in the News

Let's Keep the Science in Forensic Science

The DOJ now proposes to improve forensic science by moving its oversight and development to an office within the department. This is precisely the opposite of what was recommended by the National Research Council report and the NCFS.

Shining a light on forensics

ASU's forensic science program is more than savvy investigation. It emphasizes laboratory coursework in chemistry and biology...

IRA Belvoir Park science labs bomb targeted NI justice

Twenty-five years ago, Northern Ireland's forensic science labs at Belvoir Park in south Belfast was targeted. The IRA considered the lab a key target because of its role in analyzing evidence in terrorist cases.

Fentanyl mixed with heroin in drugs seized by police

A deadly new drug has been found for sale in Northern Ireland. The strong painkiller fentanyl has been found mixed in heroin seized by the PSNI. Police believe it was linked to two deaths in Northern Ireland and more than 60 in the rest of the UK this year.

Fiction: The science in Sherlock Holmes

When Sherlock Holmes first meets Dr John Watson, he identifies the physician's background at a glance. To many, that moment in Arthur Conan Doyle's A Study in Scarlet (1887) — Holmes's debut — is a smile-worthy flight of fancy. Except it isn't entirely fantastical. One of Conan Doyle's mentors at the University of Edinburgh, UK, where he trained as an ophthalmologist, was the surgeon Joseph Bell. And it's to him that we owe the famed exchange about Afghanistan, as well as much of Holmes's character.

How some crime writers are making the lives of forensic scientists a nightmare

Forensic science amplifies this sense of comfort in crime fiction: it produces evidence that cannot lie; it brings the most cunning of criminals to justice. In a world with no god and no certainty, these fictional scientists fill a void. They let us think that our world can be examined, analysed and rendered legible. They are modern-day magicians whose wizardry reveals indisputable truths.

Thirty years of DNA forensics: How DNA has revolutionized criminal investigations

The name Colin Pitchfork might not be as recognizable as Charles Manson or Jeffrey Dahmer. But for those in the forensic science community, it's a name that holds weight. Pitchfork was the first murderer to be caught using DNA analysis.

Officer's Failed Drug Test: How Long Does Marijuana Stay in Hair?

The New York Police Department officer — Sgt. Tracy Gittens — tested positive for marijuana on a random drug test in January, and has been on paid desk leave since then, according to the New York Post. Sources now tell the Post that Gittens claims the drug test, which used a hair sample, came back positive because officials accidentally tested strands from her human-hair weave.

As spectrometers are included in FEMA's Authorized Equipment List, agencies can purchase the devices with grant funding

Raman spectroscopy – which provides rapid, sensitive, nondestructive analysis of a variety of drug types – can provide accurate identification for a range of unknown substances. A growing number of criminal justice and law enforcement agencies are recognizing the benefits of this technology.
New law lets Texas drivers help tackle the state's rape kit testing backlog
A new law Neave authored will essentially crowd fund rape kit testing statewide. House Bill 1729, which took effect Sept. 1, directs the Department of Public Safety to allow Texans to contribute to that cause when applying for and renewing driver’s licenses and personal identification certificates.

Why the Louisiana State Police Crime Lab is one of the most efficient at processing DNA
The Louisiana State Police Crime Lab is one the most efficient crime labs in the country in terms of turn-around time in processing DNA analysis requests for law enforcement cases.

Budget cuts may shut down new crime lab in Billings
The state of Montana is facing a quarter billion dollar budget deficit as state revenue has fallen far short of expectations. Now state agencies are forced to make deep cuts to balance the budget. Like the other state agencies, the Department of Justice office must cut ten percent of their budget. That equals to about 3.4 million dollars a year.

EXCLUSIVE: First look at how NYPD is attacking the opioid epidemic
In an unprecedented step to end the opioid epidemic, the New York Police Department has increased staffing at its crime lab by more than 40 percent.

The implosion of Austin's crime lab: A timeline
What started a year ago as a few concerns over an audit has spiraled into the permanent closure of the city's crime lab and the firing of nearly all of its employees. The lab’s failures have added to a decades-long testing backlog, and may have compromised the evidence used in over 1,800 convictions. Addressing these issues will cost taxpayers a predicted $10 million, in addition to the cost of opening a new lab.

Backlog at Virginia crime lab challenges prosecutors
Where once it took six weeks or less to confirm that a seized substance was an illegal drug or to get blood-test results for a suspected drunk driver, it now can take six months.

Austin's crime lab failure points to national crisis
Some concerns in the report released last fall are simpler to fix – equipment failures or cross-contaminating evidence. Reading further though, the lab had flaws in many of its most fundamental operations. It was not only using scientifically unsound testing procedures, but its staff was often not even following those low standards.

Mass. court asked to dismiss cases tied to former drug lab chemist
A petition submitted Wednesday to the state's highest court seeks the dismissal of every case connected to a convicted former state chemist who authorities say was high almost every day she went to work at a state drug lab for eight years.

Makah Police Believe They Found Fentanyl-Laced Marijuana
Although not yet confirmed…be on the lookout!

Sheriff uneasy with available budget
“We need to be able to get into a computer and see what’s in it now, not six months from now,” he said. “Sometimes evidence is sitting at these other places for up to a year. Then the case is cold and you might not be able to find the bad guy again.”

Iowa Rape Cases Delayed by Lab Testing Backlog
The Des Moines Register reports that 405 sexual assault cases were waiting for DNA testing at the state crime lab at the end of August. That's up from the end of 2014 when 265 cases awaited processing.

Firearms Algorithm Attempts to Clarify Match Pictures
An algorithm developed by a team of scientists from Malaysia attempts to clear up pictures for quantitative comparisons of firearms and toolmark evidence, as described in an open-access study published online today.

Cotton vs. Nylon DNA Swabs: Efficiency Depends on Experience
Not all DNA swabs are equal—but that may have more to do with the hand guiding them than the material at the tip, according to a new series of tests by scientists at University College London’s Centre for the Forensic Sciences.

Document Revives Mystery of Vatican Teenager Who Vanished in ’83
The disclosure this week of a five-page, typewritten document that was stolen from an armored cabinet inside the Vatican has revived the mystery surrounding a 15-year-old who vanished in 1983.

At Least 65 Skulls Found So Far at a Mass Grave in Bosnia
The remains of at least 65 victims have been retrieved from a mass grave recently found in central Bosnia, forensic experts said Tuesday about the site of one of the most gruesome crimes of Bosnia's 1992-95 war.
Joining in us for a quick bite of knowledge. Sirchie Lunch & Learn sessions are 5-10 minute topics about relevant topics requested by our customers. Topic for Today’s Session: Understanding Live Scan & FBI NGI Technologies. We will cover the technology advancements in Live Scan and where biometric identification is going with FBI Next Generation Identification Technologies.

This webinar meets 4 times.

4. Fri, Sep 29, 2017 1:00 PM - 1:15 PM EDT

https://register.gotowebinar.com/register/700611393430126082

Our Evidence Collection Accelerated Training Program provides law enforcement professionals and crime scene investigators with hands on training using forensic tools that will help to execute the best crime scene investigation mission possible.

This class, commonly known as Crime Scene Technology, covers the scientific methods of collection, identification, evaluation, and preservation of physical evidence. It is the perfect Forensics training for any investigator from new detectives to police officers with more than 25 years on the force.

You need to attend this program if:

- You process crime scenes
- You want to learn more about the latest forensic and crime scene investigation tools and techniques used to process potential crime scenes
- You want to find as much evidence as possible at the crime scene


*Quote for 20+ year law enforcement officer on course evaluation form. We don’t give out the names of our students for their protection.

Contact us today for more information or to register.
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.

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

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

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.
provides a dashboard of the labs' own stats and FORESIGHT stats, among other information. The information, formatting, and interface may vary somewhat by vendor.

The 2015 Heroin Signature Program Report
DEA Intelligence Brief; 13 pages; August; 2017

Download the report here
Jeff Teitelbaum, MLIS | Forensic Science Library Services
Forensic Laboratory Services Bureau
Washington State Patrol
2203 Airport Way S * Seattle WA 98134 * 206.262.6027

The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: ACEware Latent Fingerprint Identification Research and Software Development
Author(s): William J. Chapman, R. Austin Hicklin
Document Number: 251092
Date Received: August 2017
Award Number: 2013-RZ-CX-0011

Here is a report just released by the National Institute of Justice:
ACEware Latent Fingerprint Identification Research

NIJ Forensic Science R&D Reports for ASCLD Crime Lab Minute Vol 11

These research reports have been submitted by the National Institute of Justice (NIJ) especially for their relevance to crime laboratory activities. ASCLD has not reviewed nor does it necessarily endorse the findings of this research.

NIJ-FBI Fingerprint Partnership Identifies 200 Missing Persons
In March of this year, a new collaboration began between the National Institute of Justice and the FBI Laboratory. Fingerprints from unidentified missing persons are sent to the FBI where a new technology, known as Next Generation Identification, along with

JusticeTrax
Two excellent job opportunities are available at JusticeTrax; Come join our Great Team! We have a Software Tester position and a Customer Care IT Support Specialist II position open.

Please read about the openings at https://justicetrax.com/employment/
Also, please consider attending the 2017 User Group Meeting: https://justicetrax.com/sales/2017-user-group-meeting/

ChemCentre Expert Solutions
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.

**National Best Practices for Sexual Assault Kits: A Multidisciplinary Approach**

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 a 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 Fingerprint**
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.

**NIFS Newsletter**