Dear Colleagues,

It is our pleasure to provide you with our Forensic Research Priorities available via this link: http://www.ascld.org/forensic-research-committee/. This list http://www.ascld.org/wp-content/uploads/2017/08/ASCLD-FRC-Research-Topics-with-Board-Priorities.pdf establishes a basis to bring together crime labs, interested researchers and funding agencies to research topics which will benefit all forensic science stakeholders.

This last week Board Member Brooke Arnone and I had the pleasure of meeting with members of IFSA (International Forensic Strategic Alliance) at the 21st Triennial Meeting of the International Association of Forensic Sciences in Toronto, Canada. At that meeting we introduced ASCLD's Forensic Research Priorities. As we discovered through our discussions at that meeting, these priorities align very well with the international community represented by IFSA, who have agreed to work together collaboratively to further forensic science research globally.

The chair of our Forensic Research Committee is Henry Maynard, Chief Scientist of the Defense Forensic Science Center. His contact email is: henry.p.maynard2.civ@mail.mil. I strongly encourage all interested labs to contact Henry to express their interest in mentoring a researcher, providing relevant and practical forensic experience to their application of science to solve our research needs. Many students pursuing forensic education require research projects to complete their degrees. Focusing these projects to benefit our community benefits both our profession and our students, enhancing their educational experience and also their future employment opportunities. The commitment can be as little as agreeing to discuss research topics with researchers or as much as conducting research at your lab as part of a collaborative partnership with a group of other interested crime labs and researchers. Please consider this tremendous coordinated opportunity to give back to our science which so greatly benefits public safety and protection of rights.

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
Proposed Revisions to the FBI National Quality Assurance Standards for Forensic DNA Testing Laboratories

The Scientific Working Group on DNA Analysis Methods, better known by its acronym of SWGDAM, is a group of scientists representing federal, state, and local forensic DNA laboratories in the United States and Canada. One of SWGDAM's responsibilities is the recommendation of revisions to the FBI's Quality Assurance Standards (QAS) for DNA Analysis. Compliance with the QAS is required by Federal law as a condition of a laboratory's participation in the National DNA Index System and for Federal grant eligibility. Historically, the SWGDAM Quality Assurance Committee is the principle group tasked with drafting revisions to the original QAS. Since issuance of the original QAS, advancements in science and the introduction of new technologies have necessitated changes to the original standards. Many of these past revisions have clarified or strengthened existing standards in the area of education, training and continuing education of the DNA personnel. As new revisions have been proposed by SWGDAM they have been discussed at SWGDAM public meetings, laboratories performing forensic DNA analysis have been given the opportunity to comment, and accrediting agencies and their constituencies have also been provided the opportunity to comment. SWGDAM has previously proposed revisions for the QAS in 2007, 2008, 2011 and 2014 which were approved and issued by the FBI Director. The current QAS and QAS Audit documents are available at the FBI's web site at http://www.fbi.gov/hq/lab/html/codis1.htm.

Following completion of a multi-year review, SWGDAM is recommending changes to the Forensic QAS. These proposed revisions to the Forensic QAS were presented to the SWGDAM membership at its July 2017 Meeting (July 11-13, 2017) and approved on August 4, 2017. In accordance with the SWGDAM Bylaws (Version July 17, 2014) these proposed changes are being made available for public comment via the SWGDAM website for a minimum of 30 days. The new proposed version of the QAS continues to describe the quality assurance requirements that laboratories performing forensic DNA testing or utilizing the Combined DNA Index System (CODIS) shall follow to ensure the quality and integrity of the data generated by the laboratory. They now also apply to forensic DNA testing laboratories using Rapid DNA instruments/Systems on casework reference samples. (The use of Rapid DNA instruments/Systems is not approved for use on forensic samples.)

The proposed revisions to the FBI National Quality Assurance Standards for Forensic DNA Testing Laboratories are now posted on the SWGDAM website and available using the link below:

SWGDAM Public Comment Page

Looking for a new opportunity?

- **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

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

Remote DNA Forensic Analyst, 4814535341, Salt Lake City, Expires: August 31, 2017

Biologist, Bode Cellmark Forensics, Quantico, VA, Expires: September 15, 2017

Physical Scientist-Trace, Bode Cellmark Forensics, Quantico, VA, Expires: September 15, 2017

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

Forensic DNA Analyst – Priority DNA, Sorenson Forensics, Salt Lake City, Expires: August 31, 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

Latent Print Examiner, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017

Property & Evidence Manager, NMS Labs, Grand Prairie, TX, Expires: October 18, 2017

Forensic Biologist III or IV Trainer, NMS Labs, Willow Grove, PA, Expires: October 18, 2017

Forensic Chemist III or IV, NMS Labs, Willow Grove/Warminster PA, Expires: October 18, 2017

Non-Tenure Track Forensic Science Faculty Position, Pennsylvania State University, University Park, PA, Expires: October 13, 2017

Forensic Science Lecturers (2), University at Albany, SUNY, Albany, NY, Expires: August 31, 2017

Staff Chemist, ORAU (Oak Ridge Associated Universities), Charlottesville, VA and OCONUS, Expires: September 29, 2017

Post doctoral scholar, The Pennsylvania State University, Forensic Science Program, Department of Biochemistry and Molecular Biology, University Park, PA, Expires: August 31, 2017

Latent Print Laboratory Director, NYS Division of Criminal Justice Services, Albany, NY, Expires: September 15, 2017

Bilingual Accreditation Manager, ANSI-ASQ National Accreditation Board, Cary, NC, Expires: September 14, 2017

Audio/Video Forensic Analyst, Houston Forensic Science Center, Houston, TX, Expires: September 30, 2017

Staff DNA Analyst (#01611), ORAU, Charlottesville, VA and OCONUS, Expires: October 2, 2017

Senior DNA Analyst (#01607), ORAU, Charlottesville, VA and OCONUS, Expires: October 2, 2017

Principal DNA Analyst (#01604), ORAU, Charlottesville, VA and OCONUS, Expires: October 2, 2017

Associate DNA Analyst (#01593), ORAU, Charlottesville, VA and OCONUS, Expires: September 29, 2017

“The American Board of Criminalistics is looking for DNA screeners, technicians and examiners. This is an opportunity to be a volunteer subject matter expert for creating a new job task analysis in efforts to redevelop the Molecular Biology Certification Examination in Forensic Biology (DNA). Please see the attached document and link if you are interested.”

Jason L. Linder, MFS, F-ABC
FORENSIC LAB MANAGER, DNA TECHNICAL LEADER | CRIME LABORATORY DIVISION
Nebraska State Patrol
3977 Air Park Road
Lincoln, Nebraska 68524
New this week!

We cordially invite you to have your gracious presence at 2nd international conference on Forensic Science and Psychology which is going to be held on October 12th and 13th, 2017 at London, UK. It is with great joy this warm welcome on behalf of our company’s management and staff.
For further details, glance at our website: https://tr.im/forensic

With Thanks,
Kellie Tylor
Program Manager | Forensic Congress 2017
Conference Series LLC
Europe: Heathrow Stockley Park Lakeside House,
1 Furze ground Way, Heathrow, UK
T: 702 508 5200 Ext: 8057
E: forensiccongress@annualconferences.org

Sirchie
Narcotics Investigation Safety - Handling Suspected Fentanyl

Wed, Sep 6, 2017 1:00 PM - 2:00 PM EDT

At Sirchie our goal is to keep officers safe. The opioid crisis and powerful nature of fentanyl and other opioids will be discussed with patrol officer and first responder safety considerations. In this webinar, you will learn: - Recent history of fentanyl and the opioid crisis in America - Recommended safety measures for handling, packaging, and transporting suspected fentanyl
https://register.gotowebinar.com/register/3013535256660289794

Upcoming Training:

DNA - Bode

16th Annual DNA & Investigators Conference – Bode East. September 11-14 in Philadelphia, PA

ANAB Training

Introduction to ISO/IEC 17025


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:
Forensic Science in the News

Police: Forensic scientists confirm wood chips found in concrete from Miller search
Sunbury Chief Tim Miller said when law enforcement dissected the walls they discovered what appeared to be wood chips. Chief Miller delivered several pieces of cement to two world-renowned forensic scientists who both confirmed wood chips were located inside the concrete pulled from the home along Front Street in Milton.

6 Science and Tech Documentaries on Netflix to Make You Smarter
Murder Maps uses a mix of archival footage and historical reenactments to look at how how forensic science has evolved and shaped criminal investigations from its dawn in the 19th century to the present day. Centered on London, the first season looked at the time of Jack the Ripper in the late 1800s, while the second season moved its focus to the early 20th century. The third season is set to kick off with 1934’s grisly Brighton trunk murders. This should be just the right mix of lurid and educational, with a posh British presenter to help it go down smooth. Arrives on Netflix: September 30, 2017

Forensic Genomics and the Science of Solving Crimes
Since the mid-1990s, forensic labs have been using this newfound knowledge to provide criminal investigators with DNA fingerprinting, that allegedly allowed to identify individuals with laser-like accuracy.

DNA lab reduces testing for missing people amid funding woes
Karen Stipes always believed her missing mother was “Mountain Jane Doe,” buried unidentified in a paupers' cemetery deep in the woods outside Harlan, Kentucky. But without proof, it took nearly half a century and the development of DNA technology for forensic scientists at the University of North Texas to confirm her intuition.

Trump Signs Bipartisan Bill For Faster DNA Testing To Solve Crimes
Swalwell said the legislation will let local law enforcement agencies – under standards and guidelines established by the FBI – perform real-time DNA testing at the time of arrest within their own booking stations, comparing samples to profiles in the FBI’s Combined DNA Index System, which is known as CODIS.

Court Strips Immunity From Bite Mark Experts Who Put Wrong Man In Jail For 23 Years
The court chronicles the long path law enforcement -- aided by two dentists -- took to Stinson in prison for a murder he didn't commit. The opinion, somewhat unfortunately, doesn't question the use of bite mark analysis as evidence. Instead, it focuses on the fabrication and other missteps/misconduct allegedly perpetrated by the analysts as they assisted law enforcement and prosecutors in building the murder case.

Rapid and Sensitive Analysis of a 93-Compound Forensic Panel in Urine using the QTRAP/Triple Quad 4500 LC-MS/MS System
This technical note describes a rapid and sensitive analysis of a comprehensive panel of forensic compounds in human urine using the ExionLCTM AC HPLC system and the QTRAP®/Triple Quad™ 4500 LC-MS/MS system. This forensic panel contains 93 compounds, and a total of 212 MRM transitions (including internal standards) are monitored. Some compounds ionize preferentially in positive mode, while others ionize preferentially in negative mode; therefore this method takes advantage of rapid polarity switching. The total LC runtime is 6.5 minutes, which can be further accelerated for a smaller panel of compounds. Sample preparation is based on enzymatic hydrolysis and a simple “dilute and shoot” methodology.

Good call on fees for state crime labs
Texas Department of Public Safety crime lab services need to remain available free of charge to city and county law enforcement agencies. Gov. Greg Abbott’s recent request that the agency retract plans to start requiring payment for the analytical services it provides law enforcement agencies across the state is good public policy.

Former state crime lab employee gets suspended sentence for stealing drug evidence
An evidence technician at the Montana State Crime Lab who stole opioids that were being stored as evidence in criminal cases, forcing prosecutors to drop charges against 69 defendants across the state, was given a suspended sentence with community service for his crimes.

Little Rock's cold-case unit makes arrest; Crime Lab work helps team charge man in September killing
After a fatal shooting in September last year, a 20-year-old man told police he was at the scene of the shooting and
fired a pistol in the direction of the victim, according to court documents obtained Monday.

New lab preps crime scene investigators
The lab, installed just weeks before fall semester, is one of three college crime labs in Indiana. Possible careers with this experience include police officer or detective, attorney or judge, crime lab analyst, or crime scene investigator.

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

Judge, lawyers: State dragging feet on Amherst drug lab scandal
Even as prosecutors scramble to address Amherst state drug laboratory misconduct that could undermine upwards of 18,000 cases statewide, a judge has lambasted law enforcement officials for their handling of the case, going so far as to say some officials committed "a fraud upon the court."

Kian tested negative for gunpowder —NPD Crime Lab
Slain teenager Kian Loyd delos Santos was tested negative for gunpowder nitrates, belying claims that he fired a gun at the policemen who were trying to arrest him during an anti-drug operation in Caloocan City last week. The paraffin test conducted on Delos Santos' body stated that "both hands of the cadaver do not contain gunpowder nitrates."

Lawsuit claims Detroit police framed man who served 25 years in prison
"On Sept. 23, 1992, Desmond Ricks, then 27, was convicted of the March 3, 1992, murder of Gerry Bennett, based on fabricated bullet evidence by Detroit Police Department Evidence technician, David Pauch, and the officer in charge of the investigation, Donald Stawiasz," reads a statement issued by Mueller Law, the firm representing Ricks in the federal wrongful imprisonment lawsuit.

Court Backlogs Could Disappear With This Drug Test
There is a type of drug test that has the potential to eliminate backlogs, speed up cases and reduce the amount of time people sit in jail awaiting court dates — but it's only used in a few pockets of the country. It could be welcome news for many at a time when the opioid epidemic has reached a nationwide state of emergency, overwhelming courts, health care and child welfare systems.

Slain East Feliciana School Board member had 'dark secret' ... 'two different lives,' attorneys claim
Broderick Brooks Sr. was an East Feliciana School Board member, a 34-year-old married father of three, an organist and singer in his church, and a recently ordained minister when he was shot to death in north Baton Rouge in May 2016. He also harbored a dark secret, a prosecutor said Wednesday at the trial of his accused killer.

http://www.sirchie.com/nark-ppe-kit-available-in-med-large-x-large-2xl.html#.WaNzc-mQxPb
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.
FORESIGHT 20/20

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

Grant Assistance for DNA

An opportunity to work at JusticeTrax doesn’t come around very often. We have a Software Tester position open! Please read about the opening at https://justicetrax.com/employment/

The Software Tester basic function is to validate the quality of JusticeTrax products. The Software Tester finds weaknesses in the products in an efficient and timely manner so Software Developers can resolve them before customers experience a problem.
Bite-Size Free Video Training Series

Take 12 minutes and learn about all the different types of swabs, their uses, how to protect your evidence, and more. Register now!

At Sirchie our goal is to keep officers safe. The opioid crisis and powerful nature of fentanyl and other opioids will be discussed with patrol officer and first responder safety considerations. In this webinar, you will learn: - Recent history of fentanyl and the opioid crisis in America - Recommended safety measures for handling, packaging, and transporting suspected fentanyl

https://register.gotowebinar.com/register/301353525668289794

Narcotics Investigation Safety Webinar: Handling Suspected Fentanyl

Wednesday, Sept. 6th 1 - 2 PM ET

At Sirchie our goal is to keep officers safe. The opioid crisis and powerful nature of fentanyl and other opioids will be discussed with patrol officer and first responder safety considerations. In this webinar, you will learn: - Recent history of fentanyl and the opioid crisis in America - Recommended safety measures for handling, packaging, and transporting suspected fentanyl

https://register.gotowebinar.com/register/301353525668289794

Experience with JusticeTrax applications, especially LIMS-plus, may be substituted for experience as a software tester.

ChemCentre Expert Solutions


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 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.

Using the PCAST to Exclude, Limit, or Minimize Expert Testimony and Opinion

Eric Alexander Vos
Criminal Justice; American Bar Association; Summer 2017

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Using the PCAST to Exclude, Limit, or Minimize Expert Testimony and Opinion

Eric Alexander Vos
Criminal Justice; American Bar Association; Summer 2017
This was the case that made criminologist Paul Kirk a household name for his investigation of the murder, and his 1956 Affidavit is a required document in many bloodstain pattern analysis training programs.

This collection presents trial transcripts, Kirk’s own investigation photos and court testimony, coroner photos and reports, and a multitude of other documents.

Link to the collection 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 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 topographies as a substitute for physical casings.