Dear Colleagues,

This last week, a number of ASCLD leaders and I were invited to meet with officials from DOJ and the Bureau of Justice Statistics to discuss the needs of forensic science. A focus in the past has been on the need for research, use of best practices and demonstration of the strengths and limitations of current methods. These are components of the needs of forensic science, however today I am going to focus upon the entire challenge our crime labs face, resources to properly match the demand for crime lab analysis.

In Project Foresight at University of West Virginia, Dr. Paul Speaker has well documented the current status of crime labs’ output metrics. In our meeting we discussed the development of an objective “should be” model, where public safety is optimized and no-one is wrongfully accused; where all forensically significant evidence is analyzed in a timely fashion. This “should be” model will permit an accurate estimate of resources needed to achieve the appropriate turn around time as well as preventing backlogs from existing, as incoming cases are matched with supply of analysis. Sufficient resources to permit research, development of best practices and demonstration of the appropriate weight or significance of evidence would also be included in this model. The difference between our current “as is” situation subtracted from this “should be” therefore establishes the resource needs to do forensic science properly.

Modeling the optimal forensic science service will permit crime labs to address crises as they happen, providing actionable information to investigators, the justice system and legislators alike. Doing anything well, particularly one as critical as forensic analyses, means doing it right the first time, before a recidivist offender chooses another victim or a wrongfully accused person goes to jail. Hence, we are committed to assisting in the development of this model, so backlogs on justice will be a thing of the past.

Ray Wickenheiser
ASCLD President
National Institute of Justice Awards

National Institute of Justice’s latest Graduate Research Fellowships in Science, Technology, Engineering, and Mathematics. NIJ has made 20 new awards in 2017 for STEM fellows, totaling $960,861 for graduate students working towards advancing NIJ’s mission. The GRF-STEM program funds dissertation research across a wide range of topics to criminal justice, including the forensic sciences.

See a full list of awards and descriptions, awardees, and dollar amounts.
Sign up to get email notices when NIJ releases GRF and other funding solicitations.

Looking for a new opportunity

- **Forensic Science & Criminology Laboratory Manager**, Scientific Analytical Tools (SAT), United Arab Emirates, Expires: November 15, 2017
- **Justice Supervisor**, State of Wisconsin-Department of Justice, Madison, WI, Expires: November 13, 2017
- **Forensic Chemist**, InCadence Strategic Solutions, Forest Park, GA, Expires: January 31, 2018
- **Forensic Scientist – Forensic Biology**, Virginia Dept. of Forensic Science, Richmond, VA, Expires: November 13, 2017
- **Forensic Analytical Chemist**, Division of Forensic Science, Delaware, Expires: November 8, 2017
- **Biometric Records Manager**, Pinellas County Sheriff's Office, Largo, Florida, Expires: December 25, 2017
- **Forensic Latent Print Analyst**, United States Postal Service, Dulles, VA, Expires: November 6, 2017
- **DNA Criminalist**, Iowa Division of Criminal Investigation, Ankeny, Iowa, Expires: November 12, 2017
- **Crime Lab Scientist – Forensic Biologist**, Georgia Bureau of Investigation, Decatur, Georgia, Expires: November 7, 2017
- **Latent Print Examiner**, Oklahoma City Police Department, Oklahoma City, Oklahoma, Expires: November 12, 2017
- **Latent Fingerprint Examiner**, Miami-Dade Police Department, Doral, Florida, Expires: November 21, 2017
- **Forensic Analyst – Biology**, Houston Forensic Science Center, Houston, TX, Expires: December 15, 2017
- **Quality Assurance Specialist (Crime Scene Sciences)**, DC Department of Forensic Sciences, Washington, D.C., Expires: November 5, 2017
- **Senior Forensic Examiner (Senior Criminalist – Firearms)**, Tarrant County Medical Examiner Criminalistics Laboratory, Fort Worth, TX, Expires: January 5, 2018
- **Assistant or Associate Professor**, John Jay College of Criminal Justice, New York, NY, New York, NY, Expires: November 17, 2017
- **Principal Chemist – Radiological/Nuclear (01597)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Senior Chemist (01603)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Staff Chemist – Radiological/Nuclear (01610)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Associate Chemist – Radiological/Nuclear (01591)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Principal Microbiologist (01601)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Senior Microbiologist (1609)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Staff Microbiologist (01596)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Associate Microbiologist (01595)**, ORAU, Charlottesville, VA and OCONUS, Expires: January 2, 2018
- **Firearms Examiner**, Houston Forensic Science Center, Houston, TX, Expires: November 15, 2017
- **Assistant/Associate Professor of Forensic Science**, Sam Houston State University, Huntsville, TX, Expires: December 31, 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
- **Senior Scientific Advisor**, Texas Forensic Science Commission, Austin, TX, Expires: December 5, 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
- **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 Lab Director**, Office Of Attorney General, Bismarck, ND, Expires: November 30, 2017
Implementing Control Measures
When writing a Chemical Hygiene Plan
by Jane Northup

The elements of a Chemical Hygiene Plan (CHP) have been the subject over the last few weeks. The last installment was on the need for SOPs (Standard Operating Procedures), the first CHP element recommended by OSHA. This installment will be the second recommendation: Criteria that the employer will use to determine and implement control measures to reduce exposure to hazardous materials (i.e., engineering controls, the use of personal protective equipment (PPE), and hygiene practices) with particular attention given to selecting control measures for extremely hazardous materials.

Reducing employee exposures from hazardous materials should be priority number one for any lab. When implementing criteria for hazard controls, we will break down the section into three categories: Engineering Controls, Administrative Procedures, and Personal Protective Equipment.

I. General Control Measures
As previously recommended in the Writing SOPs installment, your control measures are generally addressed in the SOP. Your lab should have a standard control measures policy for general work practices and then address the individual SOP control measures that are pertinent to the practices involved in a particular procedure. This should include quality control measures and/or health and safety concerns that may be present

   Engineering Controls—Criteria for Implementation

Engineering controls are laboratory equipment such as fume hoods, gas cabinets, and glove boxes. Engineering controls are considered the “first line of defense” in protecting workers whereas personal protective equipment (PPE) is generally considered the final defense. Appropriate engineering control is often obvious, but the general criteria are noted here for the common ones. The criteria should be followed unless equivalent protection can be realized. Specific engineering controls can/should also be described in a lab’s SOPs.

Fume Hoods, Wet Benches, Gas Cabinets & Other Exhaust Ventilation

- When using volatile substances that present a significant inhalation hazard.
- When necessary to keep exposure levels below OSHA Permissible Exposure Limits.
- When using toxic gases.
- When indicated in Standard Operating Procedures, or as indicated in Safety Data Sheets
Biosafety Cabinets
- With laboratory operations involving biohazardous material as directed by National Institutes of Health (NIH) and Centers for Disease Control (CDC) guidelines and the OSHA Bloodborne Pathogens Standard
- When indicated in Standard Operating Procedures

Approved Hazardous Materials Storage Cabinets and Safety Cans
- Whenever possible, but particularly when fire code volume limits
- When indicated in Standard Operating Procedures

Flammable Storage Refrigerator
- When refrigerated storage of flammable materials is needed

II. Administrative Controls—Criteria for Implementation
Administrative controls are controls to reduce hazard levels in laboratories such as training, signage, labeling, SOPs, etc. The controls instituted by a given laboratory shall be determined by the safety officer, as needed. In general, measures shall be implemented:
- As indicated in Standard Operating Procedures
- As mandated by health and safety regulations, or as called for by accepted good practice

III. Personal Protective Equipment—Criteria for Implementation
Personal Protective Equipment should be regarded as the 'last resort' for chemical and biological safety programs. PPE should be used as protection when there is no other alternative. Where Personal Protective Equipment is used, it must:
- be selected taking into account the nature of the hazard and the task,
- be provided free of charge to employees,
- be maintained in an efficient working order good repair,
- be compatible with other PPE,
- be stored in an assigned and suitable area,
- be provided in conjunction with appropriate instruction and training for the wearer

The most important aspects of the policy are when and where individuals must wear long pants, closed-toe shoes, safety eyewear, and a lab coat. Laboratory coats should be laundered through a lab coat-laundering program and not in private residences. OSHA Fact Sheet: https://www.osha.gov/Publications/laboratory/OSHAfactsheet-laboratory-safety-chemical-hygience-plan.pdf
Examples of CHPs:
University of California, Santa Barbara: http://www.chem.ucsb.edu/lab-safety-chp
University of Rhode Island: http://web.uri.edu/ehs/files/ChemicalHygienePlan.pdf
Crime Lab Safety Plans:
Raleigh/Wake City County, Bureau of Identification: https://www.forensicmag.com/article/2004/06/osha-and-forensic-laboratory

TRAINING OPPORTUNITIES

ANAB
Internal Auditing to ISO/IEC 17025

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

Forensic ISO/IEC 17025 Assessor Training (Testing)
November 13-17, 2017, Emeryville, CA

Forensic ISO/IEC 17025 Preparation (Testing)
November 13-15, 2017, Emeryville, CA
In 2018, the Forensic Science Training Institute will be offering a week-long course in Advanced Fabrics Bloodstain Pattern Analysis Training on March 19-23. The class size is limited to twelve, so please register early to ensure your seat.

For registration and full details on the course requirements, visit the Forensic Science Training Institute website here: [http://www.cedarcrest.edu/forensic/16/1.htm](http://www.cedarcrest.edu/forensic/16/1.htm)

**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.](http://www.cedarcrest.edu/forensic/16/1.htm)

Subscribe to the channel at:
- [Google Play](http://www.cedarcrest.edu/forensic/16/1.htm)
- [iTunes](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Stitcher](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Soundcloud](http://www.cedarcrest.edu/forensic/16/1.htm)

**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](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Taking the First Steps Toward Backlog Reduction](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Managing Customer Expectations and Education](http://www.cedarcrest.edu/forensic/16/1.htm)
- [How to Increase your Staff without Increasing Budget](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Efficiency Improvements](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Developing a Statewide Approach to Backlog Management](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Case Acceptance Policies and Guidelines](http://www.cedarcrest.edu/forensic/16/1.htm)

**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](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Rapid DNA: Arizona DPS and Richland County, SC](http://www.cedarcrest.edu/forensic/16/1.htm)
- [Rapid DNA: Booking Stations and CODIS](http://www.cedarcrest.edu/forensic/16/1.htm)

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


Proposed Quality Assurance Standards (QAS) changes


**Forensic Science in the News**

Forensic artist reconstructs face of Scottish ‘witch’
Her name was Lilias Adie, and she died in prison while waiting to be burned at the stake as a witch. Forensic artist Dr Christopher Rynn used the latest reconstructive methods to show us her face.

‘Uncertainties associated with bloodstain-pattern analysis are enormous’, national study

“Cognitive bias” is the way in which human judgments are shaped by factors other than those relevant to the decision at hand. It includes “confirmation bias,” where individuals interpret information, or look for new evidence, in ways that conform to their preexisting belief or assumption…

NI forensics aid Polish president's plane crash probe

Polish investigators trying to establish the cause of a plane crash that killed the country’s president, Lech Kaczynski, have asked Northern Ireland forensic scientists for help.

Courts need help when it comes to science and tech

Regarding forensic sciences specifically, both the National Academy of Sciences and the President’s Council of Advisors on Science and Technology recommended an independent federal agency, the National Institutes...
Standards and Technology, to conduct rigorous research on forensic sciences. The NAS report was clear that “advancing science in the forensic science enterprise is not likely to be achieved within the confines of DOJ,” because they have not “recognized” the need for change in the field.

LA law enforcement celebrate state-of-the-art crime lab
The Hertzberg-Davis Forensic Science Center is the largest municipal crime lab in the nation and is a state-of-the-art CSI facility on the campus of Cal State LA. It’s second in size only to the FBI crime lab in Quantico, and it's where science solves crimes.

Lincoln Memorial University Professor Awarded $377,535 Grant for Research in Forensic Science
Dudzik’s research deals with improving the methods used in forensic science to identify human remains. Currently, the most widely used quantitative method for estimating postmortem interval (PMI) is based on scores from visual observations of human remains in various states of decomposition. Once remains are skeletonized, PMI estimation is based on subjective observations of how bone decomposes.

Alabama Researcher Shares in Forensic Grant
A university professor from Alabama will share in a more than $530,000 grant for forensic research on the decomposition of human remains.

Who Betrayed Anne Frank? Former F.B.I. Agent Reopens a Cold Case
Who gave them up has remained a mystery. Now, almost 75 years later, a team of experts led by a retired F.B.I. agent is bringing modern forensic science and criminology to bear in hopes of solving one of history’s most famous cold case files.

Rapist, murderer Liam Reid files injunction against TV production company
This is not the first time Reid has taken action to try to prevent television shows airing information about his case.

Lab experts cite need for collaborations on opioids
An alarming spike in deaths from fentanyl-related compounds is challenging forensic laboratories, medical examiners and law enforcement in Michigan and across the United States, experts said Monday at a national conference on synthetic opioids in Ypsilanti.

Oklahoma Fee Measures Go Into Effect
The maximum fee for pre-sentence investigations that's charged to felons has doubled from $250 to $500. Fingerprinting and forensic science improvement fees have also doubled from $5 to $10. Felons and people convicted of traffic violations will have to pay the fees.

Forensics unravels mysterious eagle deaths
Wildlife sleuths used forensic science to determine what was killing bald eagles along the Upper Mississippi River corridor. Laboratory tests showed that nearly two-thirds of the 58 eagles examined had lead concentrations and more than one-third had clinical lead poisoning. The lab results deepened the mystery as to how these meat eating predators could have been exposed to lead.

Dubai Police use footprints to nab criminals
“The science behind kinetic foot printing demonstrates that every human being has a way of moving that is unique to them. [The technology] uses special algorithms to identify the suspect by studying his biometric [walking pattern],” Major Dr Al Awar said

Lost and Found
Several long-serving members of NecroSearch, the world’s preeminent group for locating and retrieving missing bodies, are nearing retirement age. What will happen to the Colorado-based volunteer organization once they’re gone?

Sheriff's crime lab damaged by fire
The sister of a man shot and killed by Raleigh police says it took too long before the state crime lab analyzed her brother's case and the Wake County District Attorney agrees.

Utah lawmakers fire gun, sniff pot, take in new tech at crime lab
Rep. Angela Romero, the Salt Lake City Democrat whose successful 2017 bill mandated the testing, said the speedy processing would help lab staffers turn their attention to other crimes.

Prosecutors: Thousands of cases impacted by lab misconduct
Prosecutors have identified at least 6,000 cases impacted by a former chemist who authorities say was high almost every day for eight years while she worked at a state drug lab, officials said Tuesday.

DOJ to clear sexual assault testing backlog by end of 2018
A backlog of hundreds of untested sexual assault evidence test kits could be eliminated by the end of 2018, the Wisconsin Department of Justice said Thursday as it announced another $2 million in federal grant funding.

Forensics could prove link between Plainfield shootings
The forensics, Plainfield Cmdr. Kevin Greco says, will tell investigators whether the weapon used to shoot and kill a 65-year-old Woodridge woman Saturday in a grocery store parking lot was the same as the handgun used in a suspected suicide later that day by her estranged husband.

Days before police killed him, homeless veteran fatally beat 80-year-old friend, authorities say
A man shot and killed by a Huntington Beach police officer in September in an incident caught on tape was identified Tuesday as a suspect in the fatal beating of an 80-year-old man that occurred three days before the shooting.

Lawsuit: No charges in sex assault case because police lost evidence
A sexual assault case was not prosecuted because either the Bend Police Department or St. Charles Bend lost key evidence that would have proved a woman was drugged before she was assaulted, according to a lawsuit filed on her behalf this week in Deschutes County Circuit Court.

Other 1970s Arrests, Crimes of 'Chameleon' Killer Rasmussen Discovered by NCMEC, NH State Police
Terry Peder Rasmussen, who died in a California prison in 2010 on a murder conviction under the name Curtis Kimball, likely butchered women and children from the 1970s onward from coast to coast, leaving a still-undetermined trail of bodies and victims, and assumed identities, in his wake.

Russia Hackers Had Targets Worldwide, Beyond US Election
The hackers who disrupted the U.S. presidential election had ambitions well beyond Hillary Clinton's campaign, targeting the emails of Ukrainian officers, Russian opposition figures, U.S. defense contractors and thousands of others of interest to the Kremlin, according to a previously unpublished digital hit list obtained by The Associated Press.

NYC Truck Terror Attack: New ‘Lone Wolf’ Study May Help Analysis
Saipov was self-radicalized after identifying with the cause of the Islamic State, authorities said today. Such “lone wolf” attackers may be predicted based on certain criteria, according to a new study.

'Soil Sleuth' Forensic Pioneer Lorna Dawson Wins Pride of Britain Award
The “soil sleuth” and her team have helped put some of the UK’s most evil killers behind bars by unearthing vital hidden clues to convict the guilty. Lorna’s expertise in soil forensics has seen her collaborate with the National Crime Agency, regularly presenting evidence in courts from the UK to Australia.

California Initiative Would Expand DNA Gathering, Restrict Early Parole
A Democratic lawmaker on Monday proposed a ballot measure that would bar certain convicted rapists and sex traffickers from being eligible for early release and expand the list of crimes for which a perpetrator’s DNA is collected.

Doctors Prepare for Deep Dive into Las Vegas Shooter's Brain
Stephen Paddock’s brain is being sent to Stanford University for a months-long examination after a visual inspection during an autopsy found no abnormalities, Las Vegas authorities said.

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
ASCLD Crime Lab Minute November 6, 2017

**September 2017 Newsletter**

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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.

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**Genetics in Forensics Congress**

Oxford Global Conferences: [www.oxfordglobal.co.uk](http://www.oxfordglobal.co.uk)

Oxford Global Training Seminars: [www.oxfordglobaltraining.co.uk](http://www.oxfordglobaltraining.co.uk)

**OSAC Subcommittees**

[https://www.nist.gov/topics/forensic-science/osac-subcommittees](https://www.nist.gov/topics/forensic-science/osac-subcommittees)

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**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.

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**The Forensic Science Leadership Series**

at Cedar Crest College

2018 Workshops

Cedar Crest College, Allentown, Pennsylvania
March 19th to 23rd, 2018

Course Instructors
Dr. Mark Reynolds
Mr. Edmund (Ted) Silenieks
Introduction

This course is designed primarily for practitioners who routinely examine blood stained clothing and other textiles and are required to assess, interpret, and report on bloodstain patterns as part of those examinations. The course is delivered through a combination of “face to face” instruction and self-directed learning. A minimum of 80 hours of structured learning activities is required, inclusive of a 40 hour “face to face” residential component. The course will review the underpinning principles of SPA, and apply these principles to the analysis and interpretation of bloodstains on clothing and other textiles.

When examining clothing, the practitioner must be mindful of influences such as the fibre type, texture, treatments, all of which may affect the final appearance of bloodstains. The primary focus of the course is to develop those skills required for the examination of bloodstain patterns found on clothing items, including the use of microscopy to discriminate between spatter and transfer bloodstains.

Grant Assistance for DNA

- **State Grant Assistance for Rapid DNA**
  1. Find contact information for your State Emergency Management Agency (SEMAG) Office at [www.stateemergencymanagement.org](http://www.stateemergencymanagement.org).  
  2. Call or visit the website of your State DMIR.  
  3. Request the information on the FY18 and other Federal grants.  
  4. Request a contact at the state office for grants.  
  5. Find contact person, add a contact who works with grant applications in your state. 
  6. Process forms online.  
  7. Process forms online.  
  8. Apply under applicable grants.  
  9. Submit under applicable grants.  
  10. Submit online.  
  11. Submit online.

- **Federal Grant Assistance for Rapid DNA**
  1. Find contact information for your State Emergency Management Agency (SEMAG) Office at [www.stateemergencymanagement.org](http://www.stateemergencymanagement.org).  
  2. Call or visit the website of your State DMIR.  
  3. Request the information on the FY18 and other Federal grants.  
  4. Request a contact at the state office for grants.  
  5. Find contact person, add a contact who works with grant applications in your state. 
  6. Process forms online.  
  7. Process forms online.  
  8. Apply under applicable grants.  
  9. Submit under applicable grants.  
  10. Submit online.  
  11. Submit online.

**FORESIGHT 20/20**

Greetings from the Project FORESIGHT team. We invite you to join us and submit data for the past fiscal year. FORESIGHT is a business-guided self-evaluation of forensic science laboratories across the globe. The participating laboratories represent local, regional, state/provincial, and national agencies. Faculty from the WVU College of Business and Economics provide assistance, guidance, and analysis. We link financial information to work tasks and functions. Laboratory managers can use these functions to assess resource allocations, efficiencies, and value of services—the mission is to measure, preserve what works, and change what does not.

FORESIGHT is open to any forensic laboratory that completes and submits a LabRAT form. There is no charge for participation. Attached you will find an example of an individualized report prepared for a participating laboratory. To participate, simply complete the attached LabRAT workbook and submit to Paul Speaker at email paul.speaker@mail.wvu.edu. Please send any questions to the same email address. For additional information, please visit the program web site [http://be.wvu.edu/forensic/foresight.htm](http://be.wvu.edu/forensic/foresight.htm). We are targeting a submission date of December 15, 2017.

**Evidence Technology Magazine**

[http://www.evidencemagazine.com](http://www.evidencemagazine.com)

**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/](https://justicetrax.com/employment/).

Also, please consider attending the 2017 User Group Meeting: [https://justicetrax.com/sales/2017-user-group-meeting/](https://justicetrax.com/sales/2017-user-group-meeting/).

(800) 288-5467

**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.

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Visit [Read the CFOS Newsletter here](#).
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...
students working towards advancing NIJ’s mission. The GRF-STEM program funds dissertation research across a wide range of topics to criminal justice, including the forensic sciences.

See a full list of awards and descriptions, awardees, and dollar amounts. Sign up to get email notices when NIJ releases GRF and other funding solicitations.

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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.