President's Message

In August, latent print analysts have a very unique opportunity to participate in a large-scale white box study being performed by the FBI Laboratory, Noblis, and Tom Busey of Indiana University. This fascinating project uses eye-tracking technology to evaluate how latent print examiners make decisions.

Several opportunities are available for latent print personnel to participate and it's important that the study include as many participants as possible. Below is schedule of locations where the study will be performed including contact information for the specific locations. Please consider encouraging your latent print analysts to participate, if possible.

4-5 August – Noblis, Falls Church, VA (contact: whitebox-eye@noblis.org)
15 August – Kentucky State Police Central Forensic Lab, Frankfort, KY (contact: Jeremy.triplett@ky.gov)
17 August – Georgia Bureau of Investigation Atlanta Lab, Atlanta, GA (contact: Louis.kriel@qbi.qa.gov)
19 August – St. Louis Metro Police Department, St. Louis, MO (contact: skwebb@slmpd.org)

More information may be found at: http://tinyurl.com/jjcwnwa

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The Houston Forensic Science Center

On Thursday, August 11th, The Houston Forensic Science Center will be hosting a Symposium on Exonerations and Backlogs. The symposium will include two panel discussions designed to bring attention to some of the biggest issues in the forensic community today. The first panel includes an exoneree who faced two execution dates for six murders he didn’t commit. It will address the national issue of drug exonerations resulting from faulty field testing and laboratory backlogs and how this impacts minority communities. The second panel will tackle the national rape kit backlog, the challenges laboratories face when eliminating the backlogs and the obstacles rape victims face due to these hurdles. Debbie Smith, a sexual assault survivor, will share her story as the keynote speaker. Ms. Smith is the founder of H-E-A-R-T,
Hope Exists After Rape Trauma, and the 2004 federal act that provides forensic laboratories with funding to battle DNA backlogs, is named for her.

Not only will breakfast and lunch be served, but this Symposium is also eligible for 4.5 CLE hours and .5 Ethics credits.

Research Reports

News: Details will aim to enhance NIJ’s approach in studying these areas of national concern.

Detail Applications are due by July 28, 2016.

Detail 1: Sexual Assault and Forensics Research

NIJ has steadily built both forensic laboratory capacity and foundational knowledge on issues such as sexual assault evidence collection, processing, and testing, through efforts spanning both the social and forensic sciences. This detail will work to ensure these research portfolios are well coordinated and aligned.

Read the job description.

NIJ Forensic Science R&D Reports for ASCLD Crime Lab Minute Vol 5

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.

Justice Department Issues Draft Guidance Regarding

ANSI-ASQ National Accreditation Board (ANAB) ANAB provides accreditation for ISO/IEC 17025 forensic test laboratories and ISO/IEC 17020 forensic inspection agencies and a wide variety of training, workshops, and academic programs.

ISO/IEC 17020 and Audit Preparation for Forensic Police Agencies

September 15-16, 2016, Alexandria, VA

Cost: ASQ member $600, non-ASQ member $650

ISO/IEC 17025 and Audit Preparation for Forensic
Investigating the Impact of Forensic Evidence

The work of NIJ-supported researchers from Sam Houston State University, was recently featured in Newsweek, Houston Matters and Forensic Magazine. Their study uses DNA genotyping of plants to identify exact DNA fingerprints of specific plant life. For example, identifying the exact DNA of marijuana strains could link samples back to their distributors or the DNA of pollen samples could also be used to link pollen evidence to crime scenes.

**Forensic Science: A Time of Transformation**

This NIJ Journal article describes some of the ongoing discussions in the forensic, legal, and law enforcement communities over the roles of science and forensic science and the certainty of testimony presented in the courtroom. The article gives special attention to problems related to expressing certainty in non-DNA forensic evidence fields, such as trace evidence, latent prints, and firearms.

**Error Rates for Latent Fingerprinting as a Function of Visual Complexity and Cognitive Difficulty**

Comparison of forensic fingerprint images for purposes of identification is a complex task that, despite advances in image processing, still requires highly trained human examiners to achieve adequate levels of performance. This NIJ-supported project examined the relationship between the measurable, visual dimensions of fingerprint pairs and the level of comparison difficulty for the examiners. The research found that error rates are a function of comparison difficulty and showed that it is limiting and even misleading to talk about an overall error rate for the field as a whole. The researchers noted that one of their experiments provides strong evidence that prints vary in difficulty and that the variations affect the likelihood of error.

**Improve the PDQ Database to Enhance Investigative Lead Information from Automotive Paints**

In a hit-and-run incident with no witnesses, investigators are often left with automotive paint layers recovered from the victim’s clothing as evidence. Modern automotive paint systems consist of several layers -- a clear coat over a color or base coat over two layers of undercoating. In this project, NIJ-supported researchers at Oklahoma State University developed infrared prefilters and a cross correlation algorithm for searching the Paint Data Query (PDQ) automotive database. A prefilter was developed to differentiate automotive paint samples by automobile manufacturer using the clear coat and undercoat paint layers. The algorithm can determine the assembly plant where the vehicle was made. This NIJ Journal article addresses some of the ongoing discussions in the forensic, legal, and law enforcement communities over the roles of science and forensic science and the certainty of testimony presented in the courtroom. The article gives special attention to problems related to expressing certainty in non-DNA forensic evidence fields, such as trace evidence, latent prints, and firearms.

**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.

**Employment Opportunities**

**Forensic Chemist**, Bureau of Alcohol, Tobacco, Firearms and Explosives, Walnut Creek, CA, Expires: August 5, 2016

**Analytical Chemist I – Forensic Chemistry Unit**, Delaware Division of Forensic Science, Wilmington, DE, Expires: August 31, 2016

**Assistant Director of Toxicology, Controlled Substance & Chemistry**, Connecticut Department of Emergency Services & Public Protection – Division of Scientific Services, Meriden, CT, Expires: October 3, 2016

**Forensic Scientist 1 – DNA (2 Sponsored Term Funded Positions)**, New Mexico DPS Forensic Science

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**A2LA's Training Program**

- **ASCLD/LAB-International Assessor Training Course for Testing Laboratories**
- **ASCLD/LAB-International Assessor Training Course for Breath Alcohol Calibration**
- **ASCLD/LAB-International Internal Auditor Training Course**
- **ASCLD/LAB-International Preparation Course for Calibration Laboratories**
- **American Association for Laboratory Accreditation (A2LA) A2LA’s Training Program**
Under this NIJ-supported project, Arizona State University researchers conducted three different experiments to study different aspects of forensic expert testimony. In the first experiment, juror responses were analyzed to see if the impact of having the type of method scientifically-validated influenced jurors. They found that experience of the expert or expert’s level of certainty over whether there is exculpatory evidence. Researchers found that exculpatory evidence did not weigh heavily on the mock jurors initially, but during the deliberation the presence of exculpatory evidence became equally as influential as other evidence. Finally, the third experiment investigated the influence of whether the forensic expert concedes that the analysis may include errors. The study found when the trial involved bite mark analysis, the concession decreased the value of the evidence; when the case was a fingerprint analysis, the concession actually increased the certainty of the analysis.

Exposing the Effects of Environmental Degradation on the Optical Properties of Manufactured Fibers of Natural Origin

Synthetic fibers derived from natural, biological sources – known as Manufactured Fibers of Natural Origin (MFNOs) – are becoming increasingly popular in textiles and clothing. NIJ-supported researchers at the McCrone Research Institute theorized that because the underlying polymer in MFNOs is naturally derived, the materials are more likely to be affected by environmental conditions over time, and any changes in their optical and physical properties due to degradation may have consequences in the forensic laboratory. The researchers evaluated three types of MFNOs exposed to six different environments and found that the properties of the materials were largely unchanged. Some samples showed morphological changes when exposed to ultraviolet light or submerged in water, but “these results may potentially strengthen an association if the same optical and morphological changes are seen in both the questioned and known MFNO fibers.”

Identifying and Communicating Genetic Determinants of Facial Features: Practical Considerations in Forensic Molecular Photofitting

Researchers at Pennsylvania State University, with NIJ funding, utilize the modeling of human facial features so that they can be analyzed and then related to underlying genetic variation. An important finding of the project is methodology for giving researchers a way to work with facial features to accomplish new analyses especially in helping to identify the allele played by variation at particular genes. By jointly modeling sex, genomic ancestry, and genotype the independent effects of particular alleles on facial features can be uncovered. Results on a set of 20 genes showing significant effects on facial features provide support for this approach as a novel means to identify genes affecting normal-range facial features and for approximating the appearance of a face from genetic markers.

The Effects of Acquisition of Blood Specimens on Drug Levels and the Effects of Transportation Conditions on Degradation of Drugs

NIJ-supported researchers from the Iowa Department of Public Health address the practitioner need of examining three different peripheral blood specimen collection/shipping procedures in order to determine whether significant differences in drug concentration could be detected.

Separation and Identification of Drugs of Abuse Using ESI-IMS-MS

This NIJ-supported research by Florida International University developed a method for performing rapid and inexpensive analyses of seized drugs commonly encountered by law enforcement, particularly...
controlled amphetamine substances and the emerging designer drugs that are similar in structure to amphetamine-based substances. The results suggest that chiral separation by an achiral modifier in the gas phase and the detection and identification of designer drugs are possible using the ESI-IMS-MS with an optimal solvent system.

**Microfluidic System for Automated Dye Molecule Extraction and Detection for Forensic Fiber Identification**

This NIJ-supported project succeeded in identifying and creating the optimum extraction conditions for different dyes and fabrics, and it developed an automated microfluidic dye extraction system that produces these conditions. This report provides information on the extraction solvent, the extraction chamber material, cavity shape, valve configurations, extraction temperature, and the macro fluidic extraction and analysis. The developed system enables objective comparisons of fiber dyes and a statistical error calculation useful in court testimony.

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**News Around the Globe**

**Police shooting range and Forensic Lab open**
The Daily Herald (press release)

COLE BAY--The country's first Forensic Lab and professional shooting range were opened in the old Soremar Building on Orange Grove Road on.

**Austin Scrambles with Fallout of Closed DNA Lab**
Texas Tribune

More than a month after the Austin Police Department was forced to abruptly shut down its DNA testing lab, it remains unclear whether any criminal...

**Iowa crime lab analyst fired after anti-black Facebook rant**
Newton Daily News

IOWA CITY (AP) — An Iowa state crime laboratory analyst has been terminated after posting a rant on Facebook that said she no longer feels safe..

**Budget cuts force reductions in tests at Wyoming crime lab**
The Republic

CHEYENNE, Wyo, — The director of the Wyoming Division of Criminal Investigation says he expects that the recent decision to stop performing tests of...

**Police shooting range and Forensic Lab open**
The Daily Herald (press release)

COLE BAY--The country's first Forensic Lab and professional shooting range were opened in the old Soremar Building on Orange Grove Road on...

**Officials say fired crime lab analyst's work to be reviewed**
KCCI Des Moines

DES MOINES, Iowa — State officials say the work of a crime laboratory analyst fired after posting a racist online rant will be independently reviewed by...

**Austin Scrambles with Fallout of Closed DNA Lab**
Big Country Homepage

Some laboratories in Texas switched to a more conservative analytical approach, but the Austin crime lab struggled to adopt updated protocols, ...

**Investigators still on scene where human remains were reportedly found**
Gallipolis Daily Tribune

As of 6 p.m. Sunday evening, investigators with the West Virginia State Police Crime Lab were still working on a case involving the discovery of human...

**Learn How Crime Scene Investigations Work During working on a case involving the discovery of human...**

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**Forensic Conferences**

**WVU Forensic Management Academy**
August 28 – September 2, 2016
Six days on-site in Pittsburgh, PA
Click [here](#) for course description and registration.

**Budget Planning Required?**

2nd Session - OCTOBER 3, 2016 thru MARCH 3, 2017
2nd Session is scheduled to begin October 3, 2016 Hattiesburg, MS at the Camp Shelby Joint Forces Training Center. Only 25 academy applicants will be selected to attend so apply today!

**Training**

**Ron Smith & Associates Training**

**National Latent Print Examiner Training Academy**
APPLY NOW!
2nd Session - OCTOBER 3, 2016 thru MARCH 3, 2017

**BUDGET PLANNING REQUIRED?**
3rd Session - October 2, 2017 thru March 2, 2018
RS&A now offers an intense 20 week training program designed to provide agencies with a Latent Print Examiner who is trained to competency. This academy, with 800 hours of formal training, will produce graduates that are capable of performing supervised case work and once time requirements are met, be ready to apply for IAI Latent Print Certification.

2nd Session is scheduled to begin October 3, 2016 Hattiesburg, MS at the Camp Shelby Joint Forces Training Center. Only 25 academy applicants will be selected to attend so apply today!

The total cost for this program including academy tuition, 20 weeks room and board, and 3 meals per day is $27,500.00.

Click here for complete details, photos, and the admission applications.[Link to: Ron Smith And Associates LPAcademy]

**Ron Smith & Associates National Forensic Quality Manager Training Academy**
March 29, 2017 - March 31, 2017 in Pearl, MS

It is truly amazing that, until now, there has never been a national training academy specifically designed for Quality Managers. Forensic Quality Managers have been expected to learn from "on the
**Forensic Science Week**
WMFNews2.com
GREENSBORO, N.C. -- We've all seen the television shows. Detectives solve crimes in less than an hour and even have time for commercial breaks!

**Forensic teams arrive to investigate Broomfield murder which saw 24-year-old Chelmsford man ...**
Essex Chronicle
Forensic teams have begun examining the scene of a shocking murder in Broomfield as they compile evidence. A 55-year-old man from Bracknell in ...

'Autopsy report on Gulshan attackers in August'
Dhaka Tribune
... the influence of some sort of narcotic substance; so the blood and viscera samples of the militants were sent to the CID forensic lab for chemical test.

Drug lab uncovered in historic Durban building
Independent Online
"All confiscated items will be sent to the forensic laboratory to determine the type of drug." It is believed the drug manufactured is methamphetamine ...

Greyhound racing ban: Industry body asks forensic investigator to probe mass grave claims
ABC Online
Greyhound Racing NSW has asked forensic firm KordaMentha to investigate new information concerning more possible greyhound grave sites across ...

Police shooting range and Forensic Lab open
The Daily Herald (press release)
COLE BAY--The country's first Forensic Lab and professional shooting range were opened in the old Soremar Building on Orange Grove Road on ...

Some attorneys say cuts at state crime lab will negatively affect cases
Casper Star-Tribune Online
Blonigen said cuts at the State Crime Lab will make prosecuting cases more difficult. ... Woodson hopes this will help alleviate a backlog in DNA testing. ... Last year, the FBI acknowledged its forensic unit had given flawed testimony ...

Judge Denies Claims Of 29 Claimnants To Prince Estate, Orders DNA Tests On 6 More
ETCanada.com
The number of Prince's alleged heirs has just grown significantly smaller after a Minnesota judge dismissed the claims of 29 people claiming they ...

Cold case revisited after 31 years
Davisclipper
Fielding sent the first piece of evidence to the state crime lab in 1997 but at the time DNA testing was not as precise. “Not great results, but that's where ...

Gary's death 'still a mystery', say family
Evening Telegram
"The procuracy fiscal said it would be weeks before the toxicology report came back but we still haven't heard anything. "Hopefully we find out in the ...

Iowa will recheck fired forensic scientist's work
DesMoinesRegister.com
The work of a forensic scientist for the state of Iowa fired this week after ... Pollpeter, like other criminalists performing DNA analysis for the state, was ...

The American Society of Crime Lab Directors, along with RTI, have made the below webinars available.

ASCLD Train the Directors Latent Prints Webinar - Archival
ASCLD Train the Directors DNA Discipline Webinar - Archival
ASCLD Train the Directors Controlled Substance Webinar – Archival
ASCLD Train the Directors Digital Multimedia Evidence Webinar – Archival
ASCLD Train the Directors Toxicology Webinar – Archival
ASCLD Train the Directors Firearms Webinar – Archival

Academy tuition is $2,500.00 with only 25 seats available.

Click here for complete academy details and to complete an academy application today! (Link to: Ron Smith And Associates QMAcademy)

National Footwear & Tire Track Training Academy
SEPTEMBER 5-16, 2016 (2 weeks Footwear)
OFF (September 19-30, 2016)
OCTOBER 3-14, 2016 (2 weeks Footwear)
OFF (October 17-28, 2016)
OCTOBER 31 - NOVEMBER 11, 2016 (2 weeks Tire Track)

RS&A now offers a Footwear and Tire Track Training Academy which includes 4 weeks of footwear examination training followed by 2 weeks of tire track examination training. Applicants can elect to complete the entire 6 week footwear and tire track academy or break it up and choose only the 4 weeks of footwear training or the 2 weeks of tire track training. The academy graduates of this 6 week program will learn the skills necessary to complete supervised footwear and tire track casework and will be ready to apply for a IAI Footwear Certification once time requirements have been met.

It is scheduled to begin September 5, 2016 in Hattiesburg, MS at the Camp Shelby Joint Forces Training Center. Only 20 academy applicants will be selected to attend.

The entire 6 week footwear and tire track academy the cost is set at $11,250.00.

The 4 week footwear only academy is set at $7,500.00.
The 2 week tire track only academy is $3,750.00.

Cost includes academy instruction, room and board, and 3 meals per day according to training selection.

Click here for complete details and to apply for admission today. (Link to: http://www.RonSmithandAssociates.com/Footwear)
False-Positive/Negative Error Rates in Cartridge Case Comparisons
ASCLD Rapid DNA Webinar 1 – Archival Version
ASCLD Rapid DNA Webinar 2 – Archival Version
ASCLD Rapid DNA Webinar 3 – Archival Version
ASCLD Webinar Series.