

IAI Educational Conference Program Information and Registration

Atlanta, Georgia - August 6 - 12, 2017

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102nd International Forensic Educational Conference

“The Circle of Forensics”



The IAI's 102nd International Forensic Educational Conference August 6-12, 2017 in Atlanta, Georgia

Atlanta Georgia – Full of rich history, fine dining, shopping and unique attractions! A city with Southern charm and world-class sophistication, Atlanta is easily one of the most popular destinations in the Southeast U.S. The state's largest city and capital, Atlanta offers visitors a wide selection of museums, music venues, and thriving theatre scene.

Conference Location:

The 2017 IAI Educational Conference will be at the Georgia World Congress Center with adjacent hotel accommodations at the 4-star Omni Atlanta Hotel at CNN Center, located in the heart of downtown at the Centennial Olympic Park.

[Official Conference Hotel](#)

Registration Hours Georgia World Congress Center:

- Sunday, 8/7 10am – 8pm
- Monday, 8/8 6am – 8am
11am – 4pm
- Tuesday 8/9 7am – 4pm
- Wednesday 8/10 7am – 4pm
- Thursday 8/11 7am – 4pm
- Friday 8/12 7am – 4pm



Further Information

General Conference	Conference Registration	Educational Program
Information: Candace "Candy" Murray Conference Planner (407) 810-6112	Information: Roy Reed Conference Registrar (832) 696-9448	(Lecture/Workshop/Poster): Lesley Hammer Education Coordinator (907) 242-0229

ABOUT THE IAI

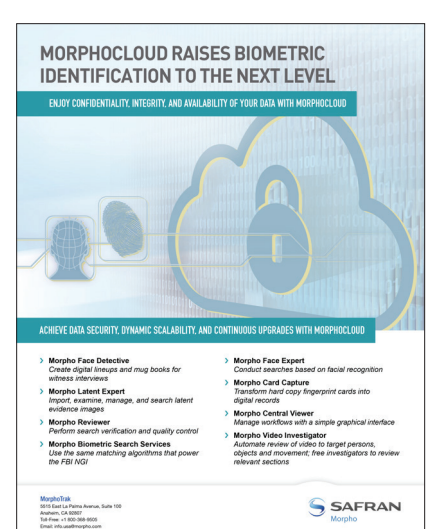
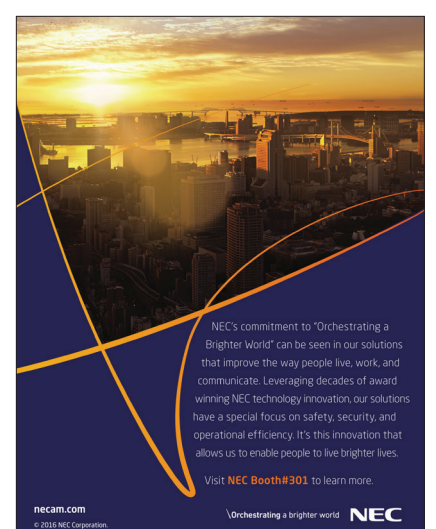
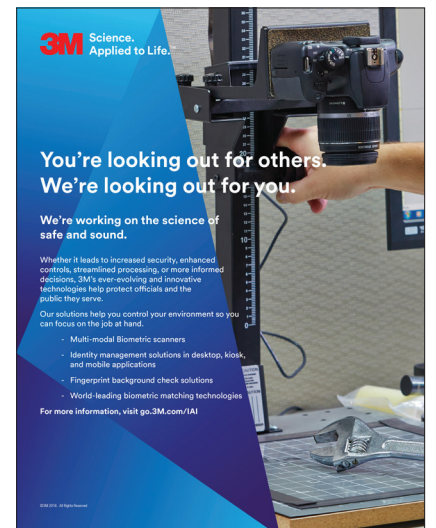
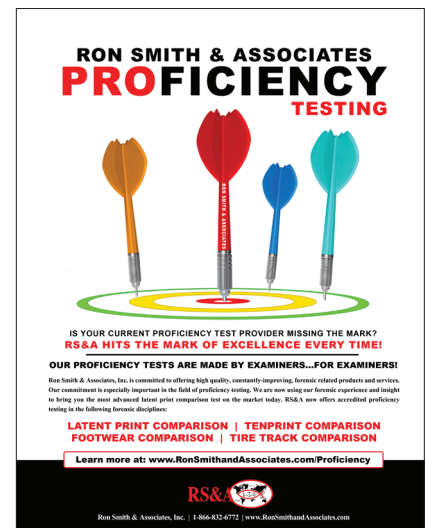
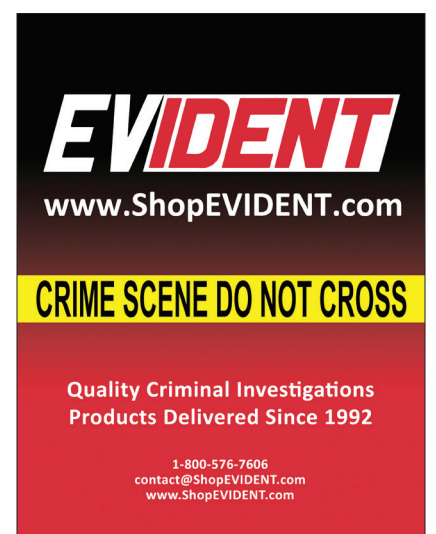
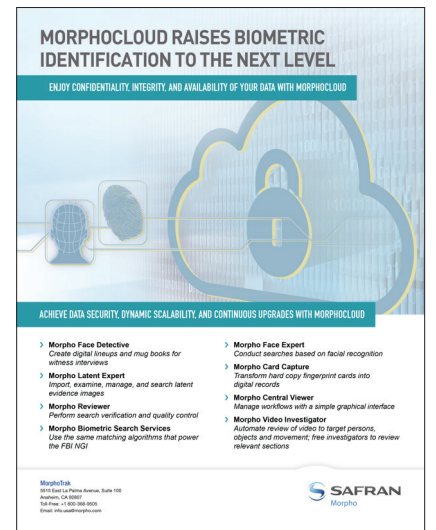
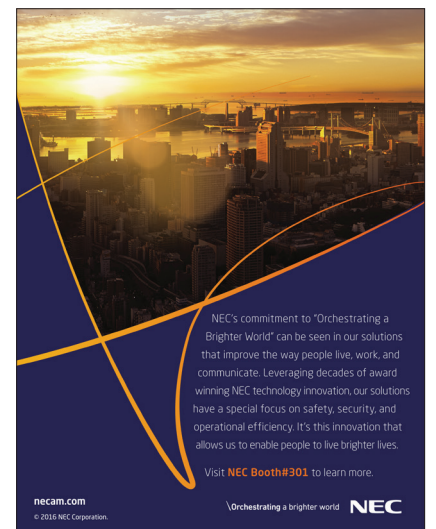
The International Association for Identification is a professional membership organization comprised of individuals worldwide who work in the field of forensic identification. With over 7,300 members from 77 countries, the IAI remains the oldest and largest forensic science/identification association in the world.

IAI Photography/Videography Policy:

The official IAI Photographer/Videographer will be onsite to photograph/video events at the Conference. The photographs/video will be used in future IAI publications and for promotion of the IAI Conference. If you object to having your image photographed, or being interviewed, please inform the photographer/videographer prior to the photograph/video being taken. For any issues or concerns regarding this, please contact the Conference Planner in the Registration Area.

Recording Policy

It is the policy of the IAI that recording by means intended to capture images, video, audio, or a combination thereof of any lecture, workshop, or other IAI sanctioned proceeding shall be prohibited without the expressed written consent of the IAI. All requests shall be made in writing and forwarded to the Chief Operating Officer for consideration by the President, Chairman of the Board and/or Board of Directors. This policy is in no way intended to prevent the occasional photograph that may be taken during the course of a presentation provided that the instructor has given approval prior to such photograph being taken.



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LECTURES BY DAY

LECTURES

MONDAY - AUGUST 8

Noon-12:25pm

The Impact of Gait on Jury Decision Making

Noon-12:55pm

A Comparison of Oil Blue A Versus Oil Red O and Physical Developer on Various Porous Substrates containing Fresh and Aged Sebaceous Latent Prints

Noon-12:55pm

Face Recognition for Law Enforcement

Noon-3:00pm

Error Management in Forensic Digital Imaging Should be a Resolution for the Forensic Science Community

Noon-4:00pm

The Devil is in the Details - Criminal Profiling from an Investigator's Perspective

12:30pm-12:55pm

A Project to Determine the Cause of the Ghosting Effect Seen in Dynamic Bare Footprints

1:00pm-1:25pm

The Use of Radiographic Images of the Foot in Forensic Evaluation

1:00pm-1:30pm

Multi-biometric Identification Supporting Face and Forensic Face Comparison

1:00pm-2:00pm

Understanding Latent Fingerprint Exclusion Decisions

1:30pm-2:00pm

Development and Status of Forensic Podiatry in India

2:00pm-2:55pm

Introduction to FBI's Face Comparison and Identification Training

2:30pm-2:55pm

Do Bare Footprints Change in Length and Width after Jumping from Height (A Pilot Study)

LECTURES

TUESDAY - AUGUST 9

Noon-12:25pm

The Impact of Gait on Jury Decision Making

Noon-12:55pm

A Comparison of Oil Blue A Versus Oil Red O and Physical Developer on Various Porous Substrates containing Fresh and Aged Sebaceous Latent Prints

LECTURES

WEDNESDAY - AUGUST 10

Noon-12:25pm

The Impact of Gait on Jury Decision Making

Noon-12:55pm

A Comparison of Oil Blue A Versus Oil Red O and Physical Developer on Various Porous Substrates containing Fresh and Aged Sebaceous Latent Prints

Noon-12:55pm

Face Recognition for Law Enforcement

Noon-3:00pm

Error Management in Forensic Digital Imaging Should be a Resolution for the Forensic Science Community

Noon-4:00pm

The Devil is in the Details - Criminal Profiling from an Investigator's Perspective

12:30pm-12:55pm

A Project to Determine the Cause of the Ghosting Effect Seen in Dynamic Bare Footprints

1:00pm-1:25pm

The Use of Radiographic Images of the Foot in Forensic Evaluation

LECTURES

THURSDAY - AUGUST 11

Noon-12:25pm

The Impact of Gait on Jury Decision Making

Noon-12:55pm

A Comparison of Oil Blue A Versus Oil Red O and Physical Developer on Various Porous Substrates containing Fresh and Aged Sebaceous Latent Prints

Noon-12:55pm

Face Recognition for Law Enforcement

Noon-3:00pm

Error Management in Forensic Digital Imaging Should be a Resolution for the Forensic Science Community

Noon-4:00pm

The Devil is in the Details - Criminal Profiling from an Investigator's Perspective

12:30pm-12:55pm

A Project to Determine the Cause of the Ghosting Effect Seen in Dynamic Bare Footprints

1:00pm-1:25pm

The Use of Radiographic Images of the Foot in Forensic Evaluation

LECTURES

FRIDAY - AUGUST 12

Noon-12:25pm

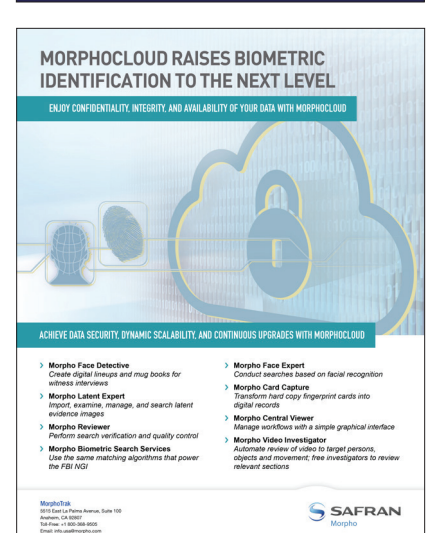
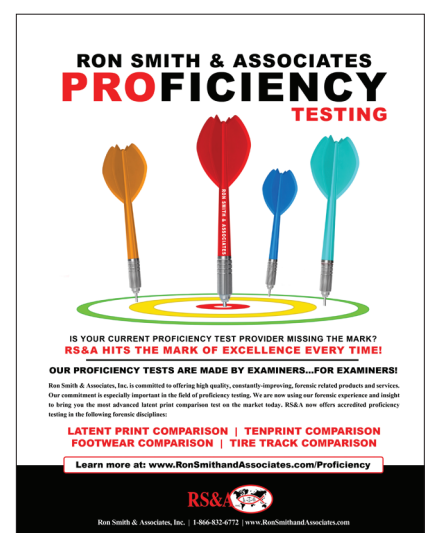
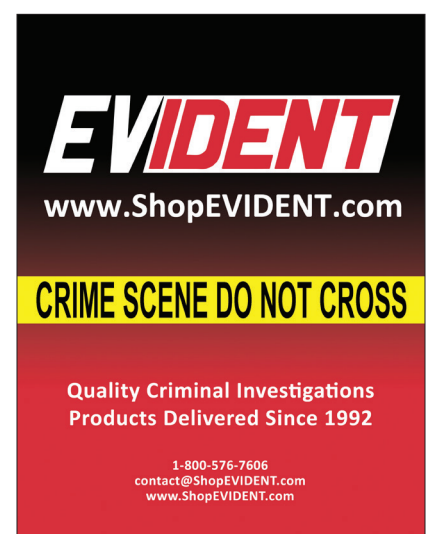
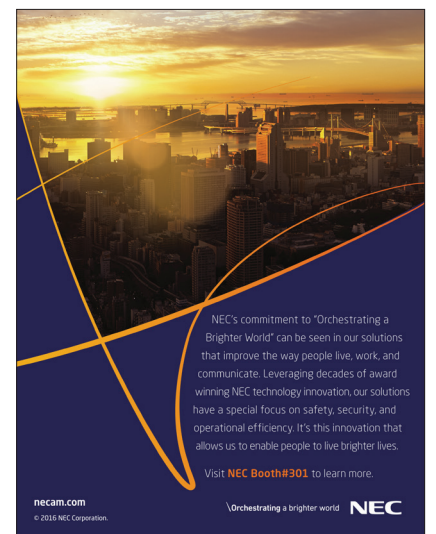
The Impact of Gait on Jury Decision Making

Noon-12:55pm

A Comparison of Oil Blue A Versus Oil Red O and Physical Developer on Various Porous Substrates containing Fresh and Aged Sebaceous Latent Prints

Noon-12:55pm

Face Recognition for Law Enforcement



**2017 IAI Workshops
Atlanta Georgia
August 7-11 2017**

8/7/17	IAI-252 - The Department of Justice's Commitment to Advancing Forensic Science	The National Commission on Forensic Science was established in 2013 by DOJ in partnership NIST to enhance the practice and improve the reliability of forensic science. As a Federal Advisory Committee, NCFs makes recommendations to the Attorney General. This presentation will provide updates on NCFs activities and recommendations.	Antell	Kira	McGrath	Johnathan
8/7/17	LPD-824 The use of Vacuum Metal Deposition to develop latent fingermarks from fired ammunition, using alternative metals.	Traditionally, the forensic VMD process involves the vaporisation of small quantities (mg) of gold followed by zinc, in which the atoms are transported in the form of a vapour through a vacuum to the surface to be coated (substrate), where they condense. The specific order in which the metals are evaporated results in the development of latent fingermarks on the surface of the exhibit being treated. Since 2014, efforts have been made to determine effective use of alternative metals to gold/zinc to develop fingermarks on difficult to process substrates. Following feedback from fingerprint experts across the world, in early 2017 a project was conducted to determine the efficiency of six different metals/metal combinations to develop latent fingermarks on fired bullet casings and shotgun cartridges. Preliminary results show that VMD was capable of developing visible ridge detail on 82% of samples processed (n = 120). Fingermarks were also developed on samples fired 28 days after fingerprint deposition. The preliminary research work on ammunition will be presented, along with further information on the metals used and how/why VMD users should consider incorporating them into their VMD operating procedures.	Brewer	Eligh		
8/7/17	LPD-109 - A Comparison of Image Quality Using Black versus White Fingerprint Powder on Non-Porous Substrates	This study assessed the image quality of processed fingerprints using an industry approved Nikon D80 SLR digital camera, fifteen different non-porous fixed and non-fixed substrates, and two colors of fingerprint powder. Traditionally, black fingerprint powder is the primary choice for crime scene investigators. However, with the advent of increased quality of digital media, the use of white powder was considered. During the course of the research, it was discovered that the use of the black fingerprint powder for substrates associated with fingerprint processing, did not produce the highest quality image for photography. Instead, the lesser-used white fingerprint powder produced a better resolution of image quality based on a multitude of different surfaces. The presentation will address the different surfaces and show images and explain the difference in quality for white vs. black powder when dusting/photographing, dusting/lifting, dusting/lifting/photographing, and dusting/lifting/scanning.	Brown	Elizabeth		
8/7/17	ART-144 - Forensic Art and Investigations: Putting Together the Pieces	The Presentation will focus on the steps that occur from the time a Composite Drawing request is submitted to the forensic artist, to court testimony and conviction. Many Composite Drawings never go past the police bulletin stages. However those composites that assist in the identification of a suspect require a number of additional investigative steps to prove the guilt of a suspect. The lecture will talk about additional investigation and evidence such as search warrants, photo lineups, live lineups, DNA, fingerprints, video and witness identification. I will also discuss why certain pieces of evidence are stronger than others and why multiple pieces of evidence together make for a stronger court case. This presentation is for the forensic artist who does not have an investigative background and has always wondered what occurs with their composite after it is given to the investigator but is open to all members of the IAI who are curious how composites work with their discipline.	Lynch	Joseph		
8/7/17	LPD-194 - A Review of Recent Published Fingerprint Research Papers (2016-2017)	The purpose of this lecture is to review a number of fingerprint research articles published over the past year in forensic science journals other than the Journal of Forensic Identification (e.g., Science & Justice, Forensic Science International, Journal of Forensic Sciences).	Ramotowski	Robert		

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8/7/17	LPI-270 - Bias Effects in Forensic Science -- A Perspective from a Case Working Forensic Scientist Who Uses Sequential Unmasking Techniques	This presentation will give a snapshot of the research conducted in forensic science to identify how bias may affect the results of a forensic technique. I will discuss my views, experiences, and cases concerning bias in forensic science. I will also share how I have used blind testing and sequential unmasking techniques to mitigate bias effects, but implementation of these methods are not without its own set of challenges, costs, and contribution to error in some cases.	Langenburg	Glenn	
8/7/17	PHO-053 - Introduction to Surveillance Photography	This introductory presentation is for personnel who may be requested to perform surveillance photography for drug, gang or other investigations. This brief presentation will explain lens selection and camera settings to use for both still scenes and moving vehicles or people to create useful surveillance images. It will also present camera position selection, options on how to hide the camera and photographer, and other tips without needing expensive equipment.	Campbell	Scott	
8/8/17	POD-124 - The talus and calcaneus in forensic identification: what they may reveal about barefoot morphology	The talus and calcaneus may be preserved in a forensic setting due to protection by sock or shoe. Studies have shown that linear and angular measurements taken from these bones correlate well with their radiographic images. Correlation between barefoot prints and weightbearing radiological measurements has also been demonstrated. This suggests that the talus and calcaneus as individual bones, as well as their radiographic images, may assist in predicting the barefoot morphology of an unknown individual.	Agoada	David	
8/8/17	GEN-283 - Wet-Vacuum Forensic DNA Sampling Dramatically Increases Capabilities To Collect Essential DNA Material And Solve More Crime	When investigators are processing a scene or items in the lab for biological evidence, choosing the most effective and appropriate collection method is essential. The importance of DNA evidence in solving both active and cold cases is continually increasing, and much of society expects physical evidence such as DNA profiles to support any prosecution. Wet-vacuum forensic DNA collection is becoming the method to turn to when traditional methods fail. This new method enables investigators to better collect DNA material, especially off of rough and/or porous surfaces, and often leads to stronger DNA profiles and more cases being solved.	Bradley	Jared	
8/8/17	ART-027 - Applications of DNA Phenotyping to Criminal Investigations	DNA Phenotyping is a revolutionary new forensic capability that accurately predicts ancestry and physical appearance from DNA evidence. Until now, DNA without a match has been worthless to an investigation. Capabilities of the Snapshot DNA Phenotyping technology will be discussed and examples from a blind evaluation study funded in part by the National Geographic Society will be shown.	Shaw	Thom	Armentrout Stephen
8/8/17	IAI-600 - OSAC update: FSSB Overview, Physics and Pattern SAC update	The Organization of Scientific Area Committee update of activities related to the Forensic Science Standards Board and the Physics and Pattern Scientific Area Committee.	Stolorow		
8/8/17	CSI-059 - Crime Scene Response to Major Incidents	This presentation will focus on the response of local law enforcement Crime Scene Unit personnel to major incidents including mass casualties and Officer Involved Shootings. The presentation will include guidelines on proper crime scene management, logistical considerations, and the emotional aftermath specifically involving Crime Scene personnel. Attendees will hear logistical details regarding the Dallas Officer Involved Shooting on July 7, 2016, the Orlando Pulse Nightclub shooting, and various other major crime scene responses throughout the country.	Nolan	Jonesta	
8/8/17	LPI-261 - Research not just for testimony anymore	This presentation will highlight two changes implemented by the FBI's Latent Print Unit (LPU): consensus panels for conflict resolution and a revised definition for claiming a print. The FBI LPU is testing a conflict resolution process that allows for differences of opinion to be retained while still producing a technically sound decision. The FBI LPU also changed its claiming definition to account for limitations associated with the process as demonstrated by research.	Gische	Melissa	Thompson Michelle

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8/8/17	GEN-237 - Case Considerations from a Defense Perspective	The majority of my courtroom appearances throughout my career have been for the prosecution. However, much of my private casework today is at the request of the defense. In this presentation I'll be sharing both good and bad aspects of some defense cases I've worked over the last three years. Most of the issues involve documentation - or the lack thereof - and will offer some guidance to ensure your casework will withstand scrutiny over time.	Black	John
8/8/17	IAI-251 - National Institute of Justice (NIJ) Updates on Forensic Science Initiatives and Funding Opportunities	The National Institute of Justice is the research, development, and evaluation agency of the U.S. Department of Justice and the lead federal agency for forensic science research and development. NIJ also administers programs to improve laboratory efficiency, reduce backlogs, and provide technical assistance to forensic laboratories. This presentation will discuss NIJ program goals, updates, and funding opportunities as well as NIJ activities to address recent NCFs and PCAST recommendations. NIJ Homepage: http://www.nij.gov/Pages/welcome.aspx	McGrath	Johnathan
8/8/17	POD-101 - Can the use of hand-held devices alter human gait?	Student podiatrists viewed footage of human gait with and without a hand-held device. Observations of gait were collected using a proforma designed for use in forensic gait analysis. A thematic analysis was undertaken of the findings with and without the hand-held device. These were presented as upper and lower body findings. The results from this study will be useful when comparing human gait captured on CCTV at a crime scene and then later in custody.	Curran	Michael
8/8/17	POD-115 - The effect of carrying weight on angle and base of gait.	This study investigated what effect carrying weight would have on the angle and base of gait of an individual person. 15 participants carried calibrated weights of 5Kg, 10 kg and 15 kg to their front, side and rear respectively. Box Plots and one way Analysis of Variance were used to analyse the findings. The results from this study may be useful in forensic gait analysis where a suspect has been identified as carrying weight.	Curran	Michael
8/8/17	FAC-122 - FISWG/OSAC Systems Group Update	Over the last year FISWG and the OSAC Facial Identification Subcommittee have started to publish key documentation for facial examination usage through the ASTM (www.astm.org) process. In addition to these documents, FISWG and OSAC are continuing to work on other key areas of interest brought to the forefront thought these two key groups: ACE-V frameworks, Image analysis in support of ACE-V, Image processing for searching, and 3D pose correction. This presentation will give a summary of this work and will gather IAI based community comments on where other focus areas can be investigated.	Gieselman	Neal
8/8/17	LPI-137 - Blind Verification of Comparison Conclusions: A Study on Case Impact and Operational Cost (Phase 1)	Blind verifications have been advocated as a solution for what ails latent print examinations. Error rate studies demonstrate how blind verifications may limit examiner error while other stakeholders believe blind verifications would mitigate bias. Yet there has been a surprising lack of research data on dealing with actual casework operations and which situations blind verifications would best impact. For six months, the USACIL Latent Print Branch completed blind verifications on all comparison conclusions in live casework. This presentation will discuss the empirical findings derived during this time period especially in regards to case impact (i.e. difference in conclusions), operational cost (i.e., time spent on verifications and/or conflict resolution), and ideal situations to apply blind verifications (i.e. does everything need a blind verification?).	Wortman	Thomas

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8/8/17	CSI-136 - Crime Scene Management Under the Microscope: Techniques for Handling Mass-Shooting Events	Proposed Title: Crime Scene Management Under the Microscope: Techniques for Handling Mass-Shooting Events and other Publicly Scrutinized Crime Scene Events. Large-scale crime scenes, particularly gruesome ones, heighten public scrutiny regarding management decisions. As such, greater attention is required to process them. Our presentation offers best practices for leadership and techniques for these scenarios, focusing on lessons learned from recent mass shootings. We will discuss errors to avoid in these scenarios, both on-scene and before/during courtroom testimony. We will conclude with potential mental impact(s) on crime scene workers and techniques for emotional support and burnout prevention.	Pettolina	Maria	Haynes	Carina
8/8/17	CSI-269 - The Digital Aspect of Your Forensics	Today's crime scene is almost guaranteed to contain digital evidence. How are you (and your department) preparing to handle it? This lecture will discuss traditional digital evidence, today's changes, and how your traditional crime scene activities are also changing. Today, photography, video, and even diagramming are linked to the digital side. This class will discuss how we can help each other without stepping all over each other.	Hoover	Jerry		
8/8/17	CSI-607 - Post Mortem Interval for Crime Scene Investigators	This lecture focuses on the chemical and physiological changes that occur with humans after death. Focus will be guided towards recognition of rigor mortis, livor mortis, algor mortis, and variables which effect each step of the decomposition process. Simple and common-sense signs will be discussed in an effort to provoke greater attention to the victim by crime scene technicians and analysts. Other topics to be discussed will include but not limited to cause and manner of death, vital records, and documentation by the crime scene analysts.	Willis	Bruce		
8/8/17	POD-074 - Competency Testing and Forensic Gait Analysis	Forensic gait analysis has come a long way in the last 17 years. An important factor is the early engagement of the discipline with competency testing, helping to establishing the credibility of this relatively new area of forensic practice. This presentation will consider the educational and practice based principles of competency testing, and how the engagement of practitioners with the competency testing process can be supported, to meet the increasing demands of criminal justice systems.	Birch	Ivan	Gwinnett	Claire
8/8/17	LPI-186 - One Man's Trash... A white-box study into the factors driving latent print suitability decisions	Variability within and between examiners on value decisions has been well-documented, but what factors most influence decision-making? Some suggest minutiae count is the driving force, but then why will some examiners call a latent with 8 minutiae suitable while others call it no value? And what happens when other aspects of suitability are considered, such as complexity or AFIS value? This lecture presents preliminary results of a white box study on suitability decisions.	Eldridge	Heidi		
8/8/17	POD-064 - Footprints in Court: Meeting a Daubert Challenge	This is an introduction to the U.S. Supreme Court's standard of admissibility of forensic evidence, known as the Daubert standard, focusing on how this standard applied to a footprint found at the scene of a homicide and was linked to the suspect by a forensic podiatrist. The presenter testified at a pretrial Daubert hearing to address the admissibility of this evidence. The judge ruled the evidence admissible and the suspect was found guilty.	Nirenburg	Michael		
8/8/17	GEN-244 - Sufficiency and Ranges of Conclusions	The threshold for sufficiency in forensic comparative science examinations is difficult to define. The examination process, unique and repeatable features in sources, levels of details within imperfect images of those features, measurement uncertainties, predictions, judgment making, the SWGFAST Sufficiency Graph and the Quality Quantity Curve, and where the potential use of expanding ranges of conclusions might take us will be discussed by the presenter.	Vanderkolk	John		

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8/8/17	ART-228 - An Impression Left Behind: Artistically Identifying the Victim of a Homicide	This lecture will discuss a forensic facial reconstruction completed by the presenter in 2017. The victim's skull, lodged in cement, was located by a cyclist on the side of a main highway in New York state. When the skull was removed from the cement by the medical examiner, an impression of the victim's face was present. A forensic facial reconstruction was completed from the skull and quickly recognized; an identification was made. This lecture will discuss not only the reconstruction by the Forensic Artist, but also the multi-disciplinary collaboration that took place, and the uniqueness of the cement impression. No recording allowed.	Gruttadaunio	Danielle		
8/8/17	FWT-207 - Case Studies in Footwear, Tire and Barefoot Evidence	This session will include a variety of case studies on footwear, tire and barefoot evidence. Presentations will be conducted by practitioners and demonstrate how these evidence types were collected and utilized from the crime scene to the courtroom.	Gorn	Michael		
8/8/17	LLS-285 - What have they got that I ain't got? Courage!	The word courage often conjures up images of heroic acts or famous icons in history. We think of courage as a personality trait "you are either born with it or you're not. This presentation will give a different perspective on courage. We will look at courage as a skill that can and must be practiced and developed. We will discuss its importance and how you can apply it in everyday leadership.	Reed	Lauren	Hall	Molly
8/8/17	BPA-510 - Bloodstain Pattern Analysis Documentation	The lecture discusses the documentation of bloodstains and bloodstain patterns. Topics include photography, roadmapping, the grid method, and report writing as it relates to bloodstain pattern analysis.	Gaziano	Calvin		
8/8/17	GEN-148 - Making a more visual identification report	This presentation will highlight using WORD & EXCEL to create a more detailed and fluid report for court.	Allard	Michael		
8/8/17	LPI-187 - So We Implemented a Statistical Model... What Happened Next?	After much hype, a statistical model for fingerprint examinations has finally been implemented into casework operations in the USACIL Latent Print Branch. What happened next? This lecture will discuss the procedural changes, operational impact, challenges that arose, solutions implemented, as well as future impact.	LeCroy	Jessica	Swofford	Henry
8/8/17	FWT-879 - Don't Tread on Me" The Recovery of Footwear Marks from the Inside of Clothing	When the cause of death involves blunt force trauma due to kicking, it may be possible to find footwear marks on the inside of clothing being worn by the victim. This occurs through the transfer of skin cells and/or oils secreted by the skin to the inner surface of clothing in a positive depiction of the pattern elements from the sole of the footwear being worn by the assailant(s). Any marks present on the interior of clothing may be visible or latent in nature. For those marks that are visible, especially on dark fabrics, a microscopic examination of pattern elements can be conducted for skin cells. For latent marks, which are generally on lighter colored fabrics, the use of lighting, photographic and chemical techniques [Ninhydrin and 1,8-Diazfluoren-9-one (DFO)] can be used to enhance the marks in order to provide contrast with the underlying surface. This presentation will discuss the best practice procedures for examining items that may bear these marks and a protocol for their enhancement/development. Several case studies, including assaults and homicides, will be discussed where developed marks on the inside of victim's clothing were compared to items of footwear from suspects.	Gorn	Michael		
8/8/17	LLS-803 - 7 Important Things I Learned as a Manager	This lecture shares some of the more valuable lessons I have learned as a rookie manager. These behaviors appear to be successful traits for managing a large group of professional forensic scientists. I'll share some resources I have used to sharpen my management skills when dealing with my team. I'll also share some anecdotes and lessons learned that have shaped how I think about manager/employee interactions.	Langenburg	Glenn		

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8/8/17	ART-258 - Computer Generated Modeling for Forensic Art	Technology in communication, visual arts and science have made huge advancements in the last few decades. Is there technology that can be used in any of the Forensic Art genres that: will not limit the forensic artist, will meet the evidentiary standards for court, and most importantly, make a positive difference in investigators' cases? This lecture will cover concerns and explore the benefits and limitations of computer-generated modeling in forensic art. No recording allowed.	Messick	Kirt
8/8/17	BPA-511 - Written in Blood: Staging of a Homicide Crime Scene	The presentation will examine a homicide crime scene in which the victim wrote a suspect's name on a wall in their own blood. Photographs and documents which assisted in the interpretation of the bloodstain evidence will be presented and discussed.	Wolson	Toby
8/8/17	CSI-146 - Drone Mapping of Crime Scenes	This presentation will highlight basic introduction to "Drone" mapping of outdoor scenes. Drone mapping can offer 2D or 3D rendering of your scene. The attendees will be shown how the data could be collected, processed, and viewed for court room presentation.	Allard	Michael
8/8/17	FAC-272 - Changing the Perception of Facial Recognition Technology in Law Enforcement	In this presentation, 3M/Gemalto will discuss the evolution and accuracy improvements that facial recognition technology as a whole has achieved in the last 5+ years leveraging NIST evaluation results from the past and present. 3M/Gemalto will also utilize multiple facial recognition use cases within Law Enforcement and other industries to display the wide range of applications that separate this unique technology from other biometric modalities in use today.	Daniel	Asraf
8/8/17	FWT-195 - Location, Recovery, and Metamorphosis of Snow Impressions Hidden Beneath Subsequent Snowfall	A series of tests were conducted to determine if impressions in snow could be recovered from beneath subsequent snowfall. Various techniques were evaluated to determine which were most successful in preserving the detail of the original impression. It was found that a significant level of detail could be recovered. The various techniques that were tested are discussed and the authors provide recommendations on techniques they found to be most successful, which involved the use of compressed air. The effect of snow metamorphosis on the stability of snow impressions is discussed.	DeFrance	Charles
8/8/17	LPI-234 - Should Fingerprint Examiners Make More Erroneous Identifications? The Answer May Not Be No...	How do latent print examiners decide when to make an identification? The placement of decision thresholds along some underlying evidence axis could put innocent persons in jail or set criminals free. Do these align with the values of society? We measured the values of examiners and the general public using a visualization based on the Ulery et al (2011) "Black Box" data. This allows us to compare what examiners say with what they actually do.	Busey	Thomas
8/8/17	ART-507 - Forensic Art Services in Germany: How Our Team Works	Forensic Artists throughout the world create composite images in varying manners, each having advantages and disadvantages. But it's possible to combine different methods & media "freehand, digital drawing, 2-D pictures and 3-D models, etc." to create effective forensic imagery. The goal is to utilize the memory of the eyewitness to create a valid likeness of the person-of-interest. This is a big part of what German Forensic Artists are taught, along with interviewing techniques, principles of proportion & aging, phenotypes, dealing with traumatized witnesses, simulated crimes and more. In order to professionally achieve the best possible results however, continual study and collection of usable information worldwide is essential. As such, Supervisory Captain Wortmann's presentation will share with attendees an overview of his team's forensic artwork niche within the world of forensics. Further, Rainer will be supplementing this lecture with a digital art workshop at this conference.	wortmann	Rainer
8/8/17	BPA-512 - Florida's Stand Your Ground Statute: A Case Study	The presentation will examine a death case in Naples, Florida, in which the defendant claimed that the decedent's death was the result of self-defense under the Florida Stand Your Ground Statute. The stand your ground statute does not require the subject to retreat from danger if they have a reasonable fear for their safety or life. Under this criteria, some defendants have acted in manner that could be interpreted as the aggressor rather than the victim of a violent crime. The presentation will examine the defendant's sworn statement concerning the incident as compared to the bloodstain patterns on the defendant's clothing and body.	Wolson	Toby

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8/8/17	CSI-606 - OSAC Update: Crime Scene Subcommittee	The Organization of Scientific Area Committee Subcommittee on Crime Scenes update	Kessler	Michael		
8/8/17	FWT-604 - OSAC update: Footwear and Tire Subcommittee	The Organization of Scientific Area Committee Subcommittee on Footwear and Tire Track Evidence update	Johnson	Matt		
8/8/17	LPI-288 - Trends in Latent Fingerprint Publications: A Bibliometric and Informal Review	There has been considerable progress in latent fingerprint research. The number of latent fingerprint publications nearly doubled from 2005-2009 to 2010-2014. This presentation will demonstrate relevant trends by measuring publications, top funding agencies, and prolific authors in the field. A bibliometric review method versus an informal review method by subject matter experts will be compared and contrasted.	Roberts	Maria Antonia	Tom	Kyle
8/9/17	GEN-700 - Wednesday Breakfast and Keynote: Forensic Analysis and Authentication of the Missing 9/11 Flag from Ground Zero, New York City, 2001.	Raising the Flag at Ground Zero, is an iconic photograph taken by Thomas E. Franklin of the Record (Bergen County, NJ), on September 11, 2001. The picture shows three New York City firefighters raising the American flag at Ground Zero of the World Trade Center, following the September 11 attacks. The flag came from the yacht Star of America, owned by Shirley Dreifus, which was docked at the yacht basin on the Hudson River at the World Financial Center. Firefighters cut the yardarm off the yacht with a K-saw and then took the flag from the yacht to an evacuation area on the northwest side of the site. They found a pole about 20 feet off the ground where it was proudly displayed. The city of New York thought it had possession of the flag after the attack, Major Rudolph Giuliani and Governor George Pataki signed it, and it flew at the New York City Hall, Yankee Stadium and on the USS Theodore Roosevelt (CVN-71) during its service in the Middle East. Even a US postage stamp was printed honoring the flag. However, when the flags owner prepared to formally donate the flag, it was discovered that the original 3 x 5 foot flag was replaced by a larger flag hours after it was raised and photographed. TV shows such as Lost History have documented the missing flag. In	Schneck	William		
8/9/17	LPD-157 - Combined Temperature and Humidity Control to Tune Latent Fingerprint Development by Superglue Fuming	In this lecture, Mark will discuss experimental work that examines the combined impact of humidity and temperature on the molecular level processes that occur during latent fingerprints fuming, with the goal of creating a protocol that can be used by forensic scientists to readily improve the efficiency and quality of fumed prints. Methods to improve the quality of fumed aged prints that are based on our fundamental understanding will also be presented.	Dadmun	Mark		
8/9/17	LPI-601 - OSAC update: Friction Ridge Subcommittee	The Organization of Scientific Area Committee Subcommittee on Friction Ridge update	Gische	Melissa		
8/9/17	FWT-206 - An Intelligence Approach to using Footwear Impression Evidence	This panel will examine how footwear impression evidence can be used to provide actionable intelligence in the investigative stage of a case. Topics to be presented include: 1. An introduction to the FBI national footwear database feasibility study. 2. Vendor demonstrations of currently available databases for determining the make/model of an item of footwear that could have left a scene impression as well as scene linking. 3. Presentations on footwear intelligence programs used in Europe.	Gorn	Michael		

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8/9/17	GEN-506 - Black Box and White Box Forensic Examiner Evaluations - Understanding the Details	There has been a great deal of recent interest in using "black box and "white box" techniques to evaluate decisions made in a variety of forensic disciplines. This talk will help dissect the details of conducting such evaluations, which are not as deceptively simple as they seem. Black box evaluations are conducted by assessing the examiner's decision without regard to how those decisions are made. Black box evaluations can provide a useful overall understanding of the accuracy, reproducibility, and repeatability of the decisions made in response to a given task. Such evaluations do not attempt to assess how a specific examiner performs on specific data " but black box evaluations are a necessary first step towards such detailed tests. Black box evaluations provide a means of quantifying forensic examinations for which quantitative models do not (yet) exist and, therefore, provide both an interim solution while such models are under development, as well as a means of validating such models. Conversely, white box evaluations are conducted to gain an understanding of how and why examiners make decisions. White box evaluations are detailed assessments of the bases of examiners' decisions, focused not just on the	Buscaglia	JoAnne	Hicklin	Austin
8/9/17	LLS-174 - CLEAR! Whump! AGAIN! Whump! Reviving the Heart of a Manager	I get it. You work for the government. You operate under the constraints of Human Resources' guidelines, and sometimes you feel like ISO corrective actions are coming from every direction. I know well the pressure of working within an accredited laboratory. I am distinctly aware of how it feels to operate under the supervision of a non-technical administrative supervisor (sworn and civilian). Unfortunately, I also know how easy it is to dole out the blame for all of your unit's problems. Well frankly, it's decision time. You can either wallow in your own pity, or you can quit complaining and get busy! If you are serious about maximizing your potential as a supervisor, if you are serious about advancing your unit instead of maintaining the status quo, if you just want to feel the zeal and excitement of making a difference again, then join me for a fast paced, interactive, highly contagious lecture and learn how to take charge of your situation. Nothing is off limits, and there is no need to bring your own tomatoes. They will be provided at the door!	Smith	Ron		
8/9/17	LPD-200 - Thermal paper, semi-porous processing and other ways Fluorescent Cyanoacrylate will change your world	The next big thing in processing! This lecture will document the application of a newly formulated fluorescent cyanoacrylate to thermal paper and semi-porous substrates. Semi-porous substrates often pose a difficult task when processing, with the technician using 3-4 different processes to maximize latent print recovery. Additionally, thermal paper's aversion to standard porous processing causes us to tread lightly to avoid the dreaded blackening of the paper. What if there was an easier way? This fluorescent cyanoacrylate will bring your sequential process of semi-porous to one single step and change the way you process thermal paper forever. Fluorescent superglue isn't just for non-porous anymore!	Brezen	Shanley		
8/9/17	LPD-164 - Advances in Latent Fingerprint Visualisation using Infrared Fluorescent Reagents	The development of Infrared (NIR) fluorescent fingerprint powders has shown promise in allowing fingermarks to be easily visualised on notoriously difficult substrate backgrounds (patterned, coloured, fluorescent and reflective). The preparation of NIR fluorescent wet powder suspensions has also been explored and results illustrate its high sensitivity and ability to develop marks where traditional powder suspensions struggle. For the first time, the use of NIR phosphorescence has also been explored using a tailored inorganic ceramic that possesses exceptional optical properties that allow all conceivable background interference to be removed.	King	Roberto		
8/9/17	LPD-184 - School of hARDROX 9703: An Alternative to the Defunct Ardrox P-133D	After the manufacturing of Ardrox P-133D was halted, a replacement was needed to replace it in RAM. A validation was conducted on the suitability of Ardrox 9703 as a 1:1 replacement. This presentation looks at the results as well as pros and cons to various experimental designs used throughout the validation.	Tom	Kyle		

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8/9/17	FAC-128 - OSAC Facial Identification Subcommittee Update 2017	This presentation will provide an overview of recent activities of the Office of Scientific Area Committees (OSAC) Subcommittee on Facial Identification (FI). It will focus on changes that occurred since the 2009 NAS Report, the role of the Facial Identification Scientific Working Group (FISWG) in relation to OSAC FI, and the current work of OSAC FI Subcommittee.									
8/9/17	LPI-166 - Run it through the system: Validation and utilization of an automated comparison software	With increasing backlogs and reliance on latent print evidence, analysts need to find methods to work smarter and more efficient. As the number of latent prints and individuals to be compared continues to grow, the utilization of automated comparison tools become increasingly advantageous. Not only for efficiency purposes, but also as a means of checking for false exclusions or missed associations. This presentation will discuss the validation of a commercially available automated comparison software for friction skin impressions. Systemic changes and operational implications of an automated workflow will be presented as well.	Gill	Kalisha	Koertner	Anthony					
8/9/17	FWT-255 - Developing and Utilizing a Local Footwear Reference Collection	Using a local footwear reference collection is an integral part of a footwear comparison in the UK but not widely used in the US. This lecture discusses some of the reasons for this, looks at some low cost strategies for developing one at your agency and explores the numerous benefits of utilizing them to allow for more accurate comparisons.	Kanaris	David	Reidy	Selina					
8/9/17	LPD-183 - FBI Processing Manual Additions	In the past decade, important chemicals used in processing latent prints have been discontinued. There have also been giant advances in processing techniques throughout the world. Over the past couple of years the FBI has begun to look for and test alternatives, replacements, and tweaks to formulas found in the FBI Processing Manual. This presentation walks through recent internal validations conducted by the FBI and the results.	Tom	Kyle							
8/9/17	GEN-503 - Panel Discussion: Twice Bitten - Finding a path forward in the wake of the PCAST report	The recent PCAST report reflected somewhat harshly on many forensic disciplines, but were their arguments entirely without merit? In this panel, latent print, footwear, and legal perspectives on the report will be presented followed by an interactive discussion between the panel members and the audience. Bring us your questions, concerns, perspectives, and collaborative spirit and let's forge a path forward together. The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the United States Department of the Army or United States Department of Defense.	Hammer	Lesley	Cino	Jessica	Eldridge	Heidi	Swofford	Henry	
8/9/17	LLS-259 - When Examiners Become Supervisors - The Trials and Tribulations of Young Leaders: A Panel Discussion	The leap from bench examiner to supervisor may feel overwhelming, especially the first couple of years. All the grand plans in your head prove to be more difficult to implement. The change from peer to manager appears convoluted. Most of all, juggling personnel quirks, backlogs, accreditation requirements, training, and budgets becomes a circus act you're not sure you signed up for. The panelists will share their own experiences as they transitioned from examiner to a leadership role within their respective agencies. Hopefully after the open and honest discussion, others contemplating and/or taking the first steps in leadership will understand they aren't alone in this difficult path and can take heart that leadership can be a trying yet rewarding experience as you guide a forensic unit in a positive and fresh direction.	Wortman	Thomas	LeCroy	Jessica					
8/9/17	FAC-171 - Introduction to the FBI's Face Comparison and Identification Training	Face comparisons are becoming more widespread and training is needed. The FBI CJIS Division offers a training class to help prepare the examiner. This lecture will introduce the training course and give the future student a look into what is covered.	Pastorial	Rachel							
8/9/17	LPI-110 - Investigative Lead Reports From AFIS: A New Approach in Managing Latent Print Throughput	Doing more with less is fast becoming the mantra for many latent print and AFIS units as budgets shrink but case requests keep going up. This lecture discusses a new approach to AFIS hit reporting by issuing investigative lead reports from on-screen comparisons. Specific language developed for the investigative lead reporting will be discussed along with data showing the percentages of full confirmation requests received compared to the number of investigative lead reports issued.	Schmahl	Tim							

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8/9/17	FWT-215 - Expert opinion evidence based on new CSI scanning technology â€” legal duties and quality requirements	An overview is provided of expert witness legal duties and Criminal Justice System (CJS) quality requirements in England (U.K.) when providing expert opinion evidence based on a new CSI scanning technology. It is geared towards impression examiners, crime scene investigators and their managers. The analysis is contributing into the development of the 3D-Forensics system â€” a mobile high-resolution 3D scanning system for the recovery and analysis of footwear and tire track impression evidence.	Crabbe	Stephen		
8/9/17	LPD-866 - 'DNA or Latent Prints? or Both?'		Jorz	Ray		
8/9/17	BIS-175 - Understanding the FBI Identity History Summary	Next Generation Identification (NGI), the FBI's computerized record system recently began operation. This new system has resulted in several changes to the Identity History Summary (IdHS) (Rap Sheet). This overview will address those changes.	Knotts-Gladwin	Christina		
8/9/17	FWT-106 - An Evaluation and Comparison of Everspry Outsole Scanner® and Magnetic Powder Method	A comparison between two methods for making footwear test impressions is presented: the relatively new Everspry Outsole Scanner® and the magnetic powder method. For the magnetic powder method, the amount of grease and powder applied are difficult to control in order to make an optimum test impression. Using this digital outsole scanner can help circumvent this problem. There are certain advantages and disadvantages of each method will be presented.	Au	Wai Sze		
8/9/17	GEN-076 - My Experiences as a TV Forensic Consultant for TV Crime Dramas	For the past 17 years, I have served as forensic science consultant to such television shows as CSI; CSI Miami, Bones, Rissoli and Isles, Law and Order, Rosewood, and the Blacklist. Through the use of personal stories and video clips from some of these shows, this presentation will show both the real and farcical aspects television crime dramas.	Laskowski	Gregory		
8/9/17	LPD-227 - Recovery of Latent Prints from Nonporous Objects Exposed to Snow	This lecture will discuss a study that investigated the effects that weather, particularly snow, could have on the recoverability of latent fingerprints from nonporous items. For all 167 impressions in the study, physical and chemical processing allowed for the development of some amount of ridge detail. These observations suggest that it may indeed be worthwhile for an agency to attempt the recovery of latent prints from evidence that was exposed to snow.	McCook	Sam		
8/9/17	BPA-513 - Context Bias Case Study	Context and confirmation bias can skew the analysis of objective evidence, alter conclusions, and impede the quest for the truth. Bias can lead to misstated and overstated conclusions of various pattern evidence including bloodstain patterns and impression evidence. This presentation examines context and confirmation bias in historical case examples and explores methods to identify and prevent bias from creeping into investigative and evidence analysis.	Graff	Gary	Graff	Iris
8/9/17	BIS-170 - Using NGI to Locate the Missing and Unknown Deceased	This presentation will inform the audience of how the FBI can assist with missing and unknown deceased individual investigations by using the Next Generation Identification (NGI) System.	Tuttle	Susan		
8/9/17	FAC-802 - Navigating the changing landscape of Mobile ID	Mobile identification technology has been in constant evolution over the last decade producing a wide array of options, many of which are customized for very specific individual customer needs. But are these solutions meeting the industry's needs as a whole? Are they advancing mobile identification at the same pace as commercial technology? This presentation asks the question, where does the law enforcement community want mobile identification technology to go and how do we get there?	Lu	Charley		
8/9/17	GEN-249 - Collaborating Across Borders: Creating an International Forensic Education Network	The need for international collaboration in forensic casework to share best practice is well recognised. In forensic education, this collaboration is still in its infancy. This presentation will outline a large EU funded project which is developing a forensic education network across multiple countries to facilitate collaborative research and provide international programmes to create effective transnational investigators. This will also include the next phase of this project which aims to include the USA.	Gwinnett	Claire		

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8/10/17	BIS-247 - Leveraging AFIS to Help Optimize Latent Print Workflow	Among the three latent print casework factors of accuracy, timeliness and thoroughness, accuracy is always paramount. That leaves timeliness and thoroughness to be balanced according to available manpower resources - and thoroughness is what is usually sacrificed. This lecture will present information about leveraging AFIS and AFIS-related tools to help increase meaningful thoroughness (not just more comparisons without identifications) and simultaneously provide valuable quality assurance feedback.	German	Ed		
8/10/17	FWT-292 - Quantitative Measures for Footwear Impression Comparisons	We discuss algorithmic approaches for identifying features present in questioned and known footwear impressions and for summarizing findings of comparisons as 'comparison metrics.' We present experimental results using a dataset of ground-truth-known mated and non-mated footwear impressions. The approach will improve repeatability, reproducibility, and accuracy for impression comparisons. The methods can aid footwear examiners provide more scientifically valid information for court cases, as well as improve intelligence gathering involving database searches.	Herman	Martin	Dogan	Gunay
8/10/17	BPA-514 - Methodology and Bias in Blood Stain Pattern Analysis	This lecture will address the process that an analyst employs when examining bloodstain patterns and bloodstain pattern analysis scenes. Because a BPA scene is often complex and rich with contextual information, the analyst must take caution to minimize the effect that bias may unknowingly play. This lecture will discuss both context and confirmation bias. Examples of these types of biases and their application to forensics in general and bloodstain pattern analysis will be explored and discussed.	Latham	Holly		
8/10/17	CSI-075 - The Travis Alexander Homicide Case	Jodi Arias was convicted in 2013 of the first-degree murder of Travis Alexander. In June 2008, Alexander was found deceased in his shower stall. A camera found in the washing machine, a palm print on the bathroom wall, and hair from the bathroom tied Arias to the scene. Arias' account of her actions changed several times, ending in a self-defense claim. Case photographs, interviews of Arias, trial testimony, and media coverage will be reviewed.	Conner	Heather		
8/10/17	FAC-230 - Fusion of Facial Recognition and Video Analytics	Video Analysis technology has been constantly improving from the days of film and VHS to today's digital recordings. Features such as frame averaging and image stabilization have become common. Likewise, Facial Recognition (FR) technology has improved over time from its beginnings of one-to-one verification of standardized photos to one-to-many matching with uncontrolled, surveillance style imagery. Features such as face matching are now being joined by body, clothing and object matching as well. By fusing Video Analytics with Facial Recognition, we now have the technology select all faces from a video, previously a time-consuming manual process. Isolating bodies and clothing allows for additional recognition capabilities, necessary when the individual may be wearing a mask or their face is turned out of view. Individuals can be matched, tagged with an identity, and track throughout multi-camera installations. This presentation will discuss a case example utilizing such technology and discuss the implications for future video and FR joint analyses.	Spaun	Nicole	Smolenak	Joshua
8/10/17	LLS-282 - Velvet Covered Brick	People often debate the effectiveness of different leadership styles, particularly contrasting the 'tough' (brick) versus the 'tender' (velvet) leader. This presentation will discuss why you shouldn't be all velvet or all brick, but learn to combine both. We will explore how gender stereotypes and emotional intelligence effect our ability to find the right balance between tough and tender as well as discuss practical ways to apply these concepts to improve how we lead.	Reed	Lauren		

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8/10/17	LPI-505 - Characterizing latent print examiner eye behavior during target group search tasks	Fingerprint comparisons may involve a complex mixture of perceptual subroutines. Relatively little is known about how examiners move their eyes to accomplish these tasks or what information guides the search process. We collected eye gaze information while 121 latent print examiners conducted specific tasks that are putative building blocks of a full comparison task: counting ridges, following ridges, and searching for particular features in a comparison print. We developed a set of spatial and temporal metrics that we used to characterize examiner eye behavior during these tasks. We found notable differences between ridge counting and ridge following. Examiners' search behavior differed notably depending on whether features were shown in the context of the full fingerprint or were cropped to have no context. The results of this research may be useful in future eye-tracking research deconstructing the fingerprint comparison task in order to understand the relations between examiner behavior and conclusions. Implications for complete latent print examination are discussed.	Ulery	Brad	Hicklin	Austin	Busey	Thomas	Roberts	Maria Antonia	Buscaglia	JoAnne
8/10/17	FWT-132 - Unblended Fillers in Footwear Manufacturing Create Accidental Characteristics	In footwear manufacturing, scrap rubber is ground and used as filler in pre-vulcanized elastomer. These particles of ground rubber go through a second vulcanization process in the making of an outsole, and become harder than the surrounding rubber matrix, which has only been vulcanized once. As the rubber outsole erodes, the harder particles of rubber appear as raised shapes, and should be considered accidental characteristics, which assist the examiner in forming the opinion of identification. This presentation includes an explanation and illustrations of the mixing process, examples of ground scrap rubber used as filler and a shoe outsole with these characteristics.	LeMay	Jan								
8/10/17	LPI-191 - Navigating a Blind Verification Policy While Minimizing Operational Impact	This presentation will outline the steps the USACIL Latent Print Branch took to adopt a working blind verification procedure. A Working Group was assembled and tasked with proposing a blind verification protocol that would fit the operational constraints of the Branch while providing optimum benefit to the Examiners. This presentation will highlight the challenges faced during the initial formation stages, up to implementation. Disclaimer: The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the United States Department of the Army or United States Department of Defense.	Kupsco	Monica								
8/10/17	BPA-517 - Using bloodstain patterns to determine the number of assailants	Any bloodstain pattern analyst knows the bloodstain patterns discovered at a crime can assist with determining what did or did not occur during the action of a criminal incident. This case study analyses one such incident. Here the attendee will learn the overall investigative activity related to a high-profile homicide investigation and the methodologies employed for identifying the individuals responsible for the crime. While bloodstain pattern analysis was one of several disciplines utilized for proving the case in the courtroom, it was crucial for showing how multiple individuals were involved during the active bleeding events.	Priest	Jonathan								

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8/10/17	FWT-156 - Part 2: Size variations associated with the different methods of recording outsole impressions	Part 2: Size variations associated with the different methods of recording outsole impressions of reference footwear for comparisons. This lecture is the follow-up and conclusion to the presentation performed at the 2016 IAI Educational Conference bearing the same title. Size determinations of footwear impressions are an important aspect of the general footwear examination scheme as significant differences in size can instantly exclude the shoe as having been the donor of a particular impression. There are several common methods/procedures for recording test impressions to permit a thorough comparison of the questioned impression with a known shoe. Test impressions are generally created on various types of surfaces with some degree of force applied to ensure a thorough recording of the outsole characteristics. Variables such as substrate composition, method of generating the test impression (e.g. walking, etc.), weight of individual, size of foot in relation to the shoe, etc. may cause variations in the overall appearance and perceived size of the impression. Although such variations are understood by the practitioner community, significant effort has not yet been directed towards quantifying the extent by which footwear impressions may vary. Over the	Koertner	Anthony	John	Jeremy
8/10/17	GEN-201 - Clandestine 3-D printed firearms as evidence	The Colorado Bureau of Investigation and Applied Research Associates partnered to research the very real threat of clandestinely manufactured firearms being used in the commission of crimes. This presentation will demonstrate the manufacture, firing and evidence processing of five 3-D printed firearms. It is not a matter of if you will begin to see these weapons in your laboratory, it is when. Get ahead of the curb and find out what advantages and hurdles this new type of evidence has in store for all laboratory disciplines.	Brezen	Shanley	Rayback	Tiffany
8/10/17	LLS-300 - Mentoring vs. Coaching in Developing Forensic Professionals	Developing the individual and transforming the individual, does the same tool work for both? What is the difference between mentoring and coaching and how can you successfully utilize one or both tools either as a mentor or mentee to grow personally and professionally? These are questions that will be addressed in this lecture. This lecture will also explore the new social networking opportunities, and how to utilize the "new world" in advancing these experiences.	O'Dell	Steven		
8/10/17	BPA-515 - Reconstruction of Bloodstain Impact Patterns: Error Rate Research Project	The purpose of the study was to determine the error rates in area of origin analyses among law enforcement personnel and to ascertain whether the reconstructions were within acceptable limits. A total of 68 novices in bloodstain pattern analysis (BPA) from multiple law enforcement agencies in Northern California participated in the study. Subjects used two different methods of measuring photographs of bloodstains with known impact (alpha) angles. The subjects also measured the directional compass (gamma) angles of the same stains. Five real bloodstain impact patterns were created and reconstructed by a BPA expert to introduce the variables of gravity and air resistance. An algebraic computer program was coded to create 20,000 synthetic impact patterns from each measurement method, for a total of 40,000 random patterns. Each of the synthetic patterns randomized the subjects' alpha and gamma measurement data before merging them with the expert's data to show the amount of deviation in the reconstructed area of origin from the known origin; the X value was 30 cm from a vertical target surface. The results of the study showed that the mean reconstructed difference from the known origin for both measurement methods was slightly smaller than the volume of a	Gaziano	Calvin		

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8/10/17	FWT-134 - Using the Adidas Boost [®] Midsole Material in Footwear Comparisons	This lecture will discuss the Adidas Boost [®] material and the significance of footwear impressions that contain this material. The Boost [®] material is new to the footwear industry and is composed of Thermoplastic Polyurethane (TPU) as opposed to the traditional Ethyl-Vinyl Acetate (EVA). The manufacturing process is different and as a result the appearance is different. EVA typically has a uniform smooth appearance. In contrast, TPU used in the Adidas Boost [®] material is comprised of hundreds of individual pea sized TPU capsules that are placed into a mold and heat steamed. The result is an outsole made up of individual TPU units fused together. The TPU units appear to be comprised of different shapes and configurations that are variable between outsoles despite being placed in the same mold. Although this is a midsole material, much of it is exposed and visible when looking at the bottom of the shoe. Portions of the TPU midsole could potentially be present in latent footwear impressions. Are these TPU components variable enough to be used as a Randomly Acquired Characteristic imparted during the manufacturing process? This lecture will discuss the impact and weight that could be applied to footwear impression comparisons with this	Johnson	Jeremy
8/10/17	GEN-289 - Getting the Most from NIBIN in Solving Crimes of Gun Violence	The ATF National Integrated Ballistic Information Network (NIBIN) is a powerful lead generating and investigative tool for the crime laboratory and law enforcement agencies. However, often times the database is not utilized to its fullest potential. Since receiving its first NIBIN system two years ago, the presenter's department as developed a teamwork approach that has been successful in solving gun violence crimes. Examples and suggestions for effective use of the NIBIN system will be presented.	Graham	Grant
8/10/17	LPI-219 - Uniform Language/Articulation	The pattern evidence disciplines have struggled to articulate conclusions in a manner that is truthful and clear. This presentation will discuss a new technique currently being tested in King County, WA. This new method strengthens conclusions while enabling clearer articulation. The results of an ongoing pilot project have established how often latent comparisons are Basic, Advanced, and Complex which allows QA measures to be implemented based on the complexity instead of equally for all comparisons.	Triplet	Michele
8/10/17	LLS-239 - Overcoming Your Fear of Public Speaking	According to many studies, the fear of public speaking is greater than the fear of death. These results may seem surprising, but let's face it - even the mere thought of speaking in front of a group can be terrifying. This short presentation will offer some advice to give you the confidence you need to both address and overcome your fear.	Black	John
8/10/17	BPA-516 - Manner and Cause of Death? Blood Stain Pattern Analysis Case Study	The lecture is a case study of an unusual scene where many bloodstains and patterns were located. Do you think you can ascertain the manner and cause of death?	Gaziano	Calvin
8/10/17	FWT-135 - How Discriminating are Class Characteristics in Die Cut Outsoles Comprised of Rubber and Textile?	How Discriminating are Class Characteristics Associated with Calendered Outsoles Comprised of Rubber Outsole and Textile Overlays? Footwear manufacturers such as TOMS [®] and Sanuk [®] use a manufacturing technique which employs die cut outsoles with an overlayment of textile material. Both the die cut and textile overlay manufacturing techniques have degrees of randomization. In the die cut process the outsole is cut with a metal die from a large sheet of pre-molded outsole material. The specific areas of the outsole pattern are random depending where the cut is made and therefore the elements observed in outsole design will vary to some degree from one to another. The TOMS [®] and Sanuk [®] models explored in this presentation have textiles overlaid and stretched over the outsole material to cover it. Each element of one calendered material will appear different in the resulting impression because of the application of the textile design. For example, the Sanuk [®] has a calendered rubber design which includes repetitive shapes. A textile which contains a repetitive pattern of holes is applied over the rubber. Given these two factors in combination, the relative position of the holes in the textile material and the position of the design from the die cut portion provide an amount of	John	Jeremy

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8/10/17	FAC-501 - Using Smart Phones and Other Mobile Devices for Automated Facial Recognition	Today's smart phones and tablets are powerful platforms for computing, sensing, and communicating. Everyone has one, we carry them with us everywhere we go, and every year, they get more powerful. They have excellent, high-resolution cameras for recording video or capturing still images. It is only natural that we want to use smart phones and tablets for facial recognition. This is no problem, and is, in fact, the new standard for law enforcement, security, and access control. This talk will describe a few example apps for mobile devices that implement facial recognition. We'll explore the algorithm, device, and infrastructure requirements for making these apps work well in your environment. And we'll talk about simple ideas for specific problems like matching faces at a distance with a mobile device.	Kocher	Bob	Sims	Lora
8/10/17	GEN-057 - Degradation of mRNA in tooth pulp during storage at room temperature.	Degradation of mRNA in tooth pulp during storage at room temperature. By Tierney Mullaney, Kyla Jorgenson, and Robert W. Allen School of Forensic Sciences, Oklahoma State University. Teeth have been used for years as a means of identification, both using X-ray comparisons as well as using teeth as a source of DNA for analysis. In this study, healthy molars and pre-molar teeth were obtained from patients undergoing extraction for orthodontic purposes and the tooth pulp was used as a source of mRNA representing genes expressed in teeth. We have been studying the degradation of mRNA in different biological materials in hopes of using transcript degradation as a means of estimating how old an evidentiary sample is. In studies on blood, semen, and saliva stains, we have identified classes of transcripts that exhibit differing rates of decomposition that may be useful to estimate sample age. Inasmuch as the question of age also applies to skeletal remains, we performed an initial analysis of the transcriptome produced from teeth subjected to aging in the laboratory for 42 or 90 days of storage. RNA sequencing (RNA-seq) on an Ion Torrent PGM next generation sequencing platform was performed using mRNA extracted from tooth pulp from healthy teeth	Mullaney	Tierney		
8/10/17	GEN-102 - American Academy of Forensic Sciences Standards Board (ASB) Firearms and Toolmarks Consensus Body	The American Academy of Forensic Sciences created the Standards Board(ASB)as a response to the need for standardization from the forensic community. This was in line with recommendations in the 2009 NAS report. It is now working in cooperation with the Forensic Science Board of the Organization of Scientific Areas (OSACS). This presentation will discuss the inception of the ASB, its legal status as an entity, its membership, its mission, a discussion on its consensus bodies with particular emphasis on the discipline of firearms and toolmarks.	Laskowski	Gregory		
8/10/17	LPD-178 - Prints of Darkness: an Illuminating Approach to Revealing Latent Prints in a CBRN Environment	When a chemical, biological, radiological, or nuclear (CBRN) event occurs in which CBRN materials have contaminated items of evidence, traditional forensics, such as latent print examination, still needs to be conducted. In order to perform this task safely, effectively, and efficiently, an appropriate location that meets the demand of the CBRN material must be selected. Both the FBI Hazardous Evidence Analysis Team and Atomic Weapons Establishment in the United Kingdom have programs set in place to perform these traditional forensics on contaminated CBRN material. This presentation will discuss these programs.	Brillhart	Monique	McOmish	Sarah
8/10/17	LPI-831 - Testimony: Articulating Difficult Concepts	Several sources have given recommendations on how to best articulate conclusions, however, most of these sources only address 1-4 concepts (100% certain, zero error rate, absolute, to the exclusion of all others). A more comprehensive reference list would be extremely beneficial for practitioners. This presentation will reference over 15 sources and attempt to clarify over 30 concepts (to include: Is uniqueness a necessity to identify to a sole source? What are the limitations on conclusions? Is it possible that someone else left this impression?)	Triplet	Michele		

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8/10/17	CSI-105 - The Investigation of the Abduction and Homicide of Jessica Ridgeway	On October 5, 2012 ten-year-old Jessica Ridgeway was abducted from the street near her home during her morning walk to school. Two days later her backpack and clothing was found discarded. A portion of her remains were recovered on Oct 10th., abandoned in a roadside ditch. DNA evidence recovered from both sites linked an unidentified male. An extensive DNA manhunt began. Over 1200 houses were searched, over 700 males DNA samples were collected and analyzed. Feeling the unrelenting pressure in his neighborhood and after being interviewed, 17-year-old Austin Sigg confessed to the abduction and murder. The presentation will outline the case, the manhunt operation and the crime scene forensics.	Read	Tim	Meier	Ivanie
8/10/17	GEN-133 - Why Can't You Provide Numbers Like DNA?	As forensic examiners, it is not our job to assign guilt or innocence, but to provide scientifically accurate information to assist the trier-of-fact in their determination. Many critics of our science claim results stated in "absolutes" lack this scientific accuracy. There has been an increasing push for examiners to change verbiage from using definitive words like "individualization", "matches", and "to the exclusion of all others", and instead provide weight to our results in the form of a statistic. The Latent Print community has discussed the use of numbers for many years, but until recently, no US laboratory had implemented a statistical model to provide weighted information to the courts. A commonly encountered judicial question is "DNA analysis provides likelihood ratios and match probabilities. Why can't you?" There will be a natural tendency for jurors to incorrectly parallel the statistics used in DNA analysis to those in pattern comparisons. If and when latent print examiners begin to testify in a probabilistic or statistical framework, it will be the examiners' responsibility to explain the different methods used in formulating these statistics. The purpose of this presentation is to provide an understanding of the differences between the statistics used in	Hall	Molly		
8/10/17	FAC-254 - Integrating the FISWG/OSAC Morphological Feature List into Facial Image Comparisons	In 2013, FISWG approved the Facial Image Comparison Feature List for Morphological Analysis detailing the features in the face that must be compared when visible in the images when conducting a comparison. This lecture will work through the Morphological Feature List and provide insight on how to integrate it into a facial image comparison using a checklist of the features. This checklist can aid an examiner during the analysis and comparison phase, providing a reliable guiding framework when conducting difficult comparisons.				
8/10/17	GEN-605 - OSAC Update: Firearms and Toolmarks	The Organization of Scientific Area Committee Subcommittee on Firearms and Toolmarks update	Smith	Andy		
8/10/17	LPD-260 - Latent Print Processing Sequence for Semi-Porous and Other Irregular Surfaces	The purpose of this research was to evaluate various processing sequences to determine best practices for the development of latent prints on semi-porous items of evidence. Through examining the effectiveness of various processing techniques, appropriate sequences were identified for the processing of substrates with both porous and non-porous qualities. Semi-porous substrates examined included magazine covers, Tyvek envelopes, Styrofoam cups, and a variety of shoe boxes.	Rogowski	Heidi	Calkins	Stacie
8/10/17	GEN-209 - Implementation and Early Success of Presumptive DNA Screening	The ability to utilize DNA in a manner relevant to the investigative timeline has been hindered by long processing times and high costs. The Kauai Police Department has implemented the use of the ParaDNA screening system to resolve and connect cases, obtain warrants, and triage further analysis. The system allows for the triage of samples and the acquisition of actionable intelligence in approximately 75min and at a fraction of the cost of full STR analysis.	Regan	Stephanie		
8/10/17	FAC-245 - Facial Recognition/Facial Identification Certification Plans	This lecture will present some of the early steps being taken toward establishment of Facial Recognition (FR) and Facial Identification (FI) certification. FR and FI examinations have been a reality in government agencies for many years. Just as has occurred with other forensic specialties, there is a need for a certification program to help ensure professional competency in accordance with OSAC, FISWG and other standards and guidelines.	German	Ed		

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8/10/17	LPI-877 - Making a Case for Effective Latent Print Casework Metrics	How do laboratory managers know how effective and efficient their latent print operations are? Latent print examiners are faced with a variety of tasks beyond the ACE/V comparisons that form the core of their work, including processing and imaging physical evidence; preparing and conducting AFIS searches; reporting examination results; performing verifications, administrative reviews, and technical reviews; participating in inter-examiner consultations; preparing courtroom presentations; providing depositions or testimony; and completing administrative paperwork. Some laboratories have made concerted efforts to collect and use metrics to measure and analyze the work conducted by their latent print units. However, there is no standard or best practice for data collection, recording, or reporting of casework metrics across the latent community. The lack of data is exacerbated by variances in process flows, data characteristics, and terminology. NIST and Noblis, in cooperation with OSAC, are working with the latent print community to define a standard set of latent casework metrics, so that there is a uniform way to assess the effectiveness and efficiency of latent print operations.	Hicklin	Austin	Taylor	Mellisa
8/10/17	BPA-602 - OSAC update: Bloodstain Pattern Analysis Subcommittee	The Organization of Scientific Area Committee Subcommittee on Bloodstain Pattern Evidence Update	Wolson	Toby		
8/10/17	GEN-830 - Who's in the Soup?	This case came to me as a request for a DNA consult from Cold Case Detectives. A double homicide occurred January 1, 2011. I was requested to do the case consult in June of 2013. Decomposed remains were recovered in 2013. This presentation will highlight how an intensive crime scene reconstruction along with DNA and CODIS results identified the victims and the location of the homicides. 	Huck	Patricia		
8/10/17	POD-070 - How do you Identify Emotions from Gait?	Video footage is played in court for a specific evidential purpose, but recent research has shown that unintended information is also gained by jury members. An example is the identification of emotion from gait. This presentation will report the findings of research investigating how people identify, process and use emotion information gained from gait, to inform decision making. The project seeks to better our understanding of the less obvious impact of playing footage in court.	Birch	Ivan	Birch	Tabitha
8/10/17	FAC-246 - Facial Recognition/Facial Identification Sourcebook	This lecture will present details about work being done between the IAI, OSAC and FISWG to create a Face Sourcebook. As with similar Sourcebooks, planned chapters include History (including face, ear, and eye manual classification systems), Anatomy of Adult Facial Skin and Eyes (including scientific bases for individuality), Image Capture of Faces and Eyes, Automated FR, Automated multi-modal systems (including iris and fingerprint), FR Screening and Examination Methodologies, FI Examination Methodologies, and more.	German	Ed		
8/10/17	GEN-222 - Testing of Accelerated Nuclear DNA Equipment	The Accelerated Nuclear DNA Equipment (ANDE _{a,c}) was designed to automatically process reference buccal swabs, enabling non-technical users to obtain DNA profiles rapidly and without laboratory equipment. The original ANDE _{a,c} BioChipSet _{a,c} (BCS) with PowerPlex [®] 16 chemistry was National DNA Index System (NDIS) approved in 2016. Further developments to the system have allowed an expansion of the number of loci, a reduction of the quantity of DNA required to obtain a profile using a Low DNA Content BCS, and an expansion of the sample types that can be successfully processed. The Defense Forensic Science Center has performed testing on these expanded capabilities and will present the results. Disclaimer: The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the United States Department of the Army or United States Department of Defense.	Olson	Keren		

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8/10/17	POD-069 - Forensic Gait Analysis - which way now?	A cursory review of the literature using the term "forensic gait analysis" shows that the approach being taken to this area of practice is far from uniform. This presentation will consider the three major strands of research and practice activity the subjective, objective and biometric identification of features of gait. Consideration will be given to likely outcomes and timescales, and how investment and activity can best be utilized to yield more rapid development of practice.	Birch	Ivan
8/10/17	Tails and Trails: The use of Human Remains Detection Dogs'		Ruslander	Harold 'Rus'
8/10/17	LPI-832 - Alternative View on Exclusions	Are erroneous exclusions considered insignificant errors? Is the erroneous exclusion rate higher than desired? This presentation will discuss the importance of accurately excluding a person as the source of a latent fingerprint, and discuss key protocols that will lead to accurate exclusions.	Triplett	Michele
8/10/17	PHO-054 - Photography Tips & Tricks I've Learned	This presentation is for personnel both new and experienced who need to improve their photos at crime scenes and of physical evidence. Practical tips will be presented on how to take photos in difficult situations such as through window glass & screens, night scenes with limited light, fingerprint impressions on difficult surfaces, and improvising equipment and items to make your job easier.	Campbell	Scott
8/10/17	GEN-190 - The impact of DNA Wet Swabbing Collection Methods on Latent Print Evidence	This presentation will discuss research performed to explore (1) the impact of DNA collection methods (wet swabbing) on subsequent latent print processing of paper items as well as (2) the impact of porous latent print processing on subsequent DNA analysis. Currently, unless a fold or some type for creased area exists on a paper items where targeted DNA swabbing can be performed, investigators are encouraged opt for either latent print testing or DNA testing rather than both. This presentation will dispel myths surrounding this issue and provide recommendations for laboratory policy. Disclaimer: The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the United States Department of the Army or United States Department of Defense.	Kupsco	Monica
8/10/17	POD-123 - Developing and testing a bare-footprint crÃme, a novel method for gathering control bare-footprints	Existing methods for recording control bare-footprints are either messy or expensive. This study investigated a method first developed by Bond (2013), a lotion containing 2, 3-butanediol, a reagent to leuco dyes found in thermo-chromic paper. This inexpensive method was reconfigured for sampling control bare-footprints. Both qualitative and quantitative results indicated this novel method could be utilized as an alternative to the existing methods, to gather large data sets for the development of a bare-footprints database.	Gwinnett	Claire
8/11/17	GEN-221 - Emerging Methods for Improved Body Fluid Identification	While DNA technologies have advanced substantially over the past several decades, methods used to determine the presence of a particular body fluid have remained stagnant. Outdated techniques limit testing to three fluids while known false positives and subjective interpretation hinder conclusions and testimony. This presentation will describe several emerging methods for body fluid identification being explored at the Defense Forensic Science Center that could complement or replace these traditional techniques, and highlight operational considerations for their implementation. Disclaimer: The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the United States Department of the Army or United States Department of Defense.	Diegoli	Toni
8/11/17	LPI-233 - Resolving Latent Conflict: What Happens When Latent Print Examiners Enter the Cage?	While studies have scrutinized latent fingerprint comparisons, it has not thoroughly examined the verification stage in a casework setting. The authors will present an analysis of approximately 2,500 cases completed by Houston Forensic Science Center latent print examiners. This analysis focuses on overall occurrence of consultation and conflict resolution over a two-year period with an emphasis on rate and trends of occurrence and outcomes in relation to examiner demographics, such as experience level.	Rairden	Alicia

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8/11/17	BIS-229 - Tattoo Comparison: Techniques and Advancement in Technology	The process of matching tattoos has long been a photographic comparison performed manually between a specific known subject and surveillance-type image. Now with advances in technology, tattoos can be compared both one-to-one and one-to-many in an automated system. This presentation will depict examples of each method and discuss the implications for the technology.	Deshpande	Kaustubh	Spaun	Nicole
8/11/17	LLS-159 - Tips for Reducing or Eliminating Backlogs – A Proven Path	Backlogs in many forensic laboratories are a major challenge. Sometimes, the challenge may seem insurmountable. Growing backlogs may hinder investigations, enable perpetrators to go unapprehended, and to some extent, lower morale. Based on experience, various suggestions for overcoming backlogs will be presented. Although every lab and jurisdiction has different realities which dictate varied approaches, many of the presented methods may easily be adapted to each environment. Participants will be encouraged to add ideas from their own experience.	Springer	Eliot		
8/11/17	LPD-193 - Validation in ISO 17025 Accredited Laboratories – Policy Guidance and a Recent Example of a Validation Study	This lecture will cover how to structure validation studies in ISO 17025 accredited laboratories as well as provide an example of a recent study conducted in the author’s laboratory. A detailed policy structure will be provided to determine how to conduct validation studies for novel methods as well as for more routine techniques that have already been published and peer reviewed in the literature. Policy topics will include: defining "validation" and why it is needed, creating a validation project plan, determining the scope of a validation study, records management, health and safety reviews, competency/proficiency testing, and determining which personnel should be involved in planning, conducting, and approving the validation study and its results. A detailed review of a recent validation study (involving the substitution of different grades of the chemical silver nitrate in the physical developer working reagent) that was performed in the author’s laboratory will be presented as well as what conclusions can be drawn from the results of such investigations. Final recommendations on how and when to conduct such validation studies will be provided.	Ramotowski	Robert		
8/11/17	CSI-152 - Courtroom Testimony for CSIs	This presentation will present practical instruction regarding courtroom testimony for crime scene investigators. It will draw from the book, "Effective Expert Witnessing" 5th edition by Jack Matson, a text required for IAI Certification as a Senior Crime Scene Analyst. This lecture will focus not only on practical courtroom testimony techniques, but how to develop an effective courtroom testimony training curriculum for crime scene units.	Nolan	jonesta		
8/11/17	CSI-273 - Are We Contaminating Our Scene of Crime Suits?	Scene of Crime Officer (SOCO) suits are standard protection for major scenes to prevent contamination from both DNA and trace particulates but what if we are contaminating our suits? This presentation will outline a series of studies that have identified that transfer of fibres from SOCO’s clothing to the outside of the suits occurs during donning and that these subsequently persist long enough to enter the scene of crime. Suggestions of how to reduce this contamination will be discussed.	Gwinnett	Claire		

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8/11/17	BIS-800 - What about Tattoos? Human Identification using Tattoo Images	Surveillance systems are very important for government to monitor and identify suspects such as potential terrorists and extremists. In practical law enforcement scenarios and in the absence of popular hard biometric traits (e.g. face, iris or fingerprints) on surveillance cameras footage, soft biometric traits, such as tattoos, may be the only clue available that can be used for either suspect identification or ruling out suspects. While the use of tattoo images solely for identity recognition may be challenging and limited, the use of tattoo information and meta-data to enhance retrieval techniques and then perform human identification is a very popular research topic. In this presentation we will discuss recently developed reliable algorithmic approaches that support tattoo-based biometric identification, namely tattoo-registration (i.e. alignment) and the use of tattoo body location metadata to enhance tattoo matching. The tattoo-based image registration system we will discuss is tested using both the NIST-Tatt-C database (with 109 subjects collected under uncontrolled conditions) and the WVU-Tatt database (with 79 subjects collected under controlled conditions). In the presentation we will show that we obtained 100% registration accuracy in both databases used, and that our new tattoo	Bourlai	Thirmachos		
8/11/17	DIG-257 - Information Session: The Forensic Video Certification Exam	An information session for anyone interested in completing the IAI's Forensic Video Examination Certification. Topics covered will include changes to the test within the last year, updates to reference material, and tips for preparation.	Meline	Kimberly		
8/11/17	LPI-231 - Biometrics Terminology for Fingerprint Examiners	Fingerprint examiners and biometric technologists often speak different languages. Because AFIS technology is evolving to play a greater role in the fingerprint examination process, it is important for stakeholders to have a common language and understanding. This lecture covers key terminology and concepts every fingerprint examiner should understand to collaborate with the biometrics industry and get the most out of their AFIS experience.	French	Michael		
8/11/17	DIG-248 - OSAC Digital/Multimedia Scientific Area Committee Update	The Organization of Scientific Area Committees (OSAC) for Forensic Science is part of an initiative by NIST and the Department of Justice to strengthen forensic science in the United States. The organization is a collaborative body of more than 500 forensic science practitioners and other experts who represent local, state, and federal agencies, academia, and industry. OSAC supports the development and promulgation of forensic science consensus documentary standards and guidelines, and to ensure that a sufficient scientific basis exists for each discipline. This presentation will bring IAI Conference Attendees an update on the latest progress of the Digital/Multimedia SAC, which includes Digital Evidence, Facial Identification, Video/Imaging Technology and Analysis and Speaker Recognition.	Vorder Bruegge	Richard	Kriigel	Carl
8/11/17	GEN-242 - Individualization of pubic hair bacterial communities and the effects of storage time and temperature	A potential application of microbial genetics in forensic science is detection of transfer of the pubic hair microbiome between individuals during sexual intercourse using high-throughput sequencing. In addition to the primary need to show whether the pubic hair microbiome is individualizing, one aspect that must be addressed before using the microbiome in criminal casework involves the impact of storage on the microbiome of samples recovered for forensic testing. To test the effects of short-term storage, pubic hair samples were collected from volunteers and stored at room temperature (~20 oC), refrigerated (4 oC), and frozen (-20 oC) for 1 week, 2 weeks, 4 weeks, and 6 weeks along with a baseline sample followed by amplification and sequencing of the V3/V4 region of the 16S rRNA gene. Individual microbial profiles (R2 = 0.69) and gender (R2 = 0.17) were the greatest sources of variation between samples. Because of this variation, individual and gender could be predicted using Random Forests supervised classification in this sample set with an overall error rate of 2.7% + 5.8% and 1.7% + 5.2%, respectively. There was no statistically significant difference attributable to time of sampling or temperature of storage within individuals. Further work on larger sample sets will	Williams	Diana		

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8/11/17	LPI-038 - Minutiae in Nature: The Evidence for Identifiable Patterns Throughout Forensic Disciplines	Individualized minutiae characteristics exist throughout nature and are not exclusive to humans or primates. This presentation examines specimens throughout nature which exhibit unique, identifiable fingerprint-type patterns in the fields of forensic botany, entomology, marine biology, geology, ornithology, and wildlife forensics. Additionally, there will be a focus on primate and marsupial print patterns and how they compare to human fingerprint characteristics. This presentation will involve minutiae pattern comparison with several species through hands-on application.	Hall-Rivera	Jennifer				
8/11/17	LLS-111 - Bridging Forensic Science and Management: the FORnsic Assessment of Technology Effectiveness index	This presentation is about the development of a decision support index for forensic identification managers that takes into account various key factors. The ultimate goal is to obtain an index linking forensic science and management. Particular attention will be paid to the allocation of values to the various information enabling managers to make an informed decision. Author also seek the help of participants in order to assess the key factors values via an online Survey.	Beaudoin	Alexandre				
8/11/17	LLS-833 - " The Do's and Don'ts of Creating A Curriculum Vitae"	Defense attorneys are taught that a CV is the easiest part of an expert witness to attack. Don't give attorneys ammunition against you before you've even begun your testimony. This presentation will help you create a CV that demonstrates your expertise and professionalism without over exaggerating your qualifications.	Triplet	Michele				
8/11/17	CSI-268 - Building the Crime Scene Investigator: Training Methodologies for Real World Success	The crime scene investigator is tasked with the coordination of many procedures and scientific techniques in an uncontrolled environment where every action has consequences. Training to competency in such technical skills should engage the student in practical application in as realistic of an environment as possible in order to train as you fight. This presentation will examine comprehensive training methodologies that prepare investigators for the actual job tasks they will face inside the perimeter tape.	McDonald	Edward 'Ted'				
8/11/17	BIS-214 - A new AFIS is going operational - there is much more than only technical changes	The AFIS-operation in Switzerland is not only used as a tool but as the major cornerstone in all our national fingerprint-related processes. Thus, the introducing of a new AFIS in 2016 opened fascinating opportunities like an integrated ACE-V-documentation and flexible workflows but it raised important challenges like an ISO-conform validation and major changes to our process-es. With this lecture, we would like to share our initial ideas, experiences and lessons-learned with the fingerprint community.	Glaeser	Axel	Aebersold	Kurt		
8/11/17	DIG-116 - Update from OSAC Subcommittee on Video Imaging Technology and Analysis (VITAL)	This presentation will provide an overview of recent activities of the Office of Scientific Area Committees (OSAC) Subcommittee on Video Imaging Technology and Analysis (VITAL). It will focus on changes that occurred since the 2009 NAS Report, the role of the SWGs, events around SWGIT's cease of operations, SWGDE, and how OSAC and VITAL came into being. Current work of VITAL on Digital Video Recorders, Video Analysis, and Latent Print Photography.	Vorder Bruegge	Richard	Kriegel	Carl		
8/11/17	GEN-047 - The Importance of Validation in Forensic Laboratories	To explain what method validation is, why it is important to have method validation in every forensic laboratory even if publication references are the requirement and not more, and how to set up a method validation to properly document findings for inspections and audit.	O'Neill	Danielle				
8/11/17	BIS-169 - Dispositions: The Missing Piece of the Criminal History Puzzle	Dispositions are an important element in the Criminal History Record (CHR). Users of the CHR need complete information in order to make informed decisions. This presentation will show different methods of providing dispositions to the FBI's CJIS Division.	Tuttle	Susan				
8/11/17	DIG-603 - OSAC update: Digital Evidence Subcommittee	The Organization of Scientific Area Committee Subcommittee on Digital Evidence Update	Watson	Steven	Kriegel	Carl	Vorder Bruegge	Richard
8/11/17	BIS-220 - In-person Proofing and Multi-factor Authentication in Support of the Identity Lifecycle	A continuing challenge with identity verification is the over-reliance on knowledge-based authentication and poor initial proofing. Weak passwords and low levels of assurance plague online transactions and create vulnerabilities. In this session, attendees will learn of innovative methods to ensure reliable proofing and discuss a variety of multi-factor means that promote and propagate strong identity verification and authentication, either for online or in-person transactions.	Clancey	Patrick				

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Date	Time Start	Time End	Workshop Title	Description	Presenter(s)			
					Last Name	First	Last Name	First
8/7/17	01:00PM	02:30PM	W-GEN-143 - Fracture Examination Workshop	This workshop will include a discussion of unique and repeatable patterns, the examination process, and practical examinations of broken, torn, and separated items. The participants will examine a variety of separated plastic, paper, cardboard, plastic bags, and other objects to determine common origin of pieces. After completion of this workshop, the participants should have better confidence in the fracture examination process. Previous experience in CSI or comparative science is beneficial for the participant.	Vanderkolk	John		
8/7/17	01:00PM	03:30PM	W-LPD-096 - Developing latent prints on firearms, cartridges and spent cartridge cases; does anything really work	Latent print examiners are continually getting questioned on why we don't develop prints on these items. This workshop will look at commonly used and novel techniques available for processing and review some recent publications.	Knaap	Wade		
8/7/17	01:00PM	03:30PM	W-LPI-078 - Orientation Clues: Search Easy Before You Search Hard	Most of your cases may have a few latent prints and are easy to search but what if you received a case with 150 latent prints to compare to 25 individuals and the latents contain tips and sides of fingers. How do you know have confidence in your search before excluding the individual? Fingers have general clues to aide your search. The correct orientation can help you work through a difficult case by narrowing your search time as well as giving the confidence the represented area in the record print has been searched. This information is also useful when conducting AFIS searches. This presentation covers finger and foot print clues, but no palms. You will need to bring a magnifier.	Siegel	Sandy		
8/7/17	01:00PM	04:00PM	W-CSI-117 - Evidence Detection across the Spectrum: Using Forensics Light Sources from 254nm to >1000nm	Forensic Light Sources are important tools aiding in evidence detection both at the crime scene and in the laboratory. When utilized to their fullest potential, many different types of evidence can be detected, documented, and collected for further processing or enhancing. In this workshop, you will have the opportunity to try several different types of light sources covering the Shortwave Ultraviolet, Visible, and Near Infrared portions of the spectrum. You will be able to locate numerous types of evidence, such as: hairs, fibers, inks, biological evidence, latent prints, and many others. This workshop is designed for the examiner with no light source experience to one who might want a refresher. There will be a brief lecture on how light sources work, then hands on stations with different types of light sources. The equipment utilized ranges from a conventional LED torches to the latest technology available. Please feel free to bring your own light source and camera, and assistance will be provided using your own device.	Goldey	Jon	Hiller	Walter
8/7/17	01:00PM	04:00PM	W-CSIS-01 - CSI Series: Crime Scene Processing (Part 1 of 2)	This workshop is part of the CSI Series. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. This orientation workshop on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops related to this series (all listed as W-CSIS) may be taken as needed. Other series workshops offered during the conference include: photography, scene mapping, latent print development, footwear impression collection, bloodstain pattern analysis, trace and DNA evidence collection. This workshop will introduce investigators to the basic concepts of crime scene investigation and will serve as a refresher for those already conducting crime scene investigations. Topics covered in the lecture portion will include: crime scene security and management, safety, photography, scene documentation, evidence collection. Practical exercises will include: photography, scene documentation, latent print development, footwear impression collection, bloodstain pattern analysis. A mock crime scene workshop Friday will culminate the student's learning. Camera and tripod are required.	Burt	Timothy		
8/7/17	01:00PM	04:00PM	W-DIG-267 - Open Source Digital Forensics using Autopsy and Linux	Open source tools have finally made it to the front of the digital forensics field. Autopsy, now a Windows Application does basically everything the most expensive commercial tools do and it's free. In this workshop we will learn how to use Autopsy and other Open source tools to Acquire, protect, and examine digital evidence as well as extract and preserve evidence of interest.	Hoover	Jerry		
8/7/17	01:00PM	04:00PM	W-FWT-090 - How Xtreme is Xtreme?	What differentiates General from Xtreme wear? How unique is Xtreme Wear and how reliable is it in the examination process? Ongoing research on Xtreme Wear, utilizing the same brand, same style/model and same size shoes worn by the same individual covering the same geographical area over a period of years, will be discussed. After the introductory lecture, the participants will have an opportunity to benefit from hands on examinations of Xtreme wear utilizing some of the shoes provided for research. All participants will be able to take away a much deeper understanding of just how unique Xtreme wear really is.	Byrd	Jon		

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8/7/17	01:00PM	04:00PM	W-LLS-196 - You Have the Skills, Now Land the Job	This session is designed for professionals interested in advancing their careers. Career prospects in the field of forensics are good, but getting in and advancing take more than just excellent technical skills. You've got to be able to understand and win at Applicant Tracking Systems and Interviews. Both require focused communication, preparation, and persuasion. By attending this session you will understand how to maximize your chances at landing the interview and the job!	Greene	Jennifer		
8/7/17	01:00PM	04:00PM	W-PHO-055 - Introduction to Photoshop: Level 1	Photoshop: Level I (Basic), David Johnson, CLPE, Forensic Scientist - Latent Print Detail, Las Vegas Metropolitan Police Department, Las Vegas Nevada. This workshop is designed to provide the Forensic Practitioner with a better understanding of Adobe Photoshop and how it can be used in the analysis of digital images. This is the first in a series and will cover: Basic Settings, Bridge, RAW conversion, Basic Image Adjustments, Layers, and Image Sizing. This series is designed to improve the skills of Practitioners working with Adobe Photoshop. Participants may take one or all of the workshops in the series depending on current skill level and comfort with Adobe Photoshop.	Johnson	David		
8/7/17	01:00PM	04:00PM	W-PHO-216 - DSLR Camera (the basics)	To provide law enforcement personnel with the basics of their DSLR camera, above the automatic controls as well as the elements of photographic exposure. Student labs will demonstrate the effects of motion, depth of field and digital noise while learning to manipulate their equipment to maximize the desired effect.	Kasper	Paul		
8/7/17	01:00PM	04:00PM	W-POD-532 - Competency Testing of Footprint/Feet-in-shoes examinations	Both the examination of footprint evidence and the examination of feet-in-shoes evidence can be used to provide useful information to assist in the identification/elimination process in criminal investigations. The credibility of each type of examination is supported by the competence of the practitioner. This workshop will explain the practicalities of the UK Chartered Society of Forensic Sciences' Certificate of Professional Competence test in the context of footprint/feet-in-shoes examinations with required hands-on mock casework.	Reidy	Selina	Reed	Sarah
8/7/17	01:00PM	05:00PM	W-CSI-811 - Trajectory of Vehicles: Rods, Strings and Lasers	This workshop will introduce techniques required to analyze shooting trajectory evidence recovered in vehicles that are involved in shooting related incidents. Proper trajectory analysis of firearm related evidence recovered in vehicles is critical to analyzing every piece of the puzzle and for attempting to determine the approximate positions of victims, witnesses, and suspects, as well as the chronologic sequence of events. This workshop will provide the forensic practitioner with hands-on experience by practicing trajectory reconstruction techniques in mock crime scene vehicles containing shooting incident evidence.	Goudeau	Jeff	Johnson	Jan
8/7/17	06:00PM	10:00PM	W-PHO-040 - Painting with Light Workshop	Painting with Light. Learn and know your're camera settings. How to photograph a scene during daylight hours or nighttime hours. What kind of flashlight or lights that are out there. Shoot a scene to assist the student on the functions of their camera. What settings to put their camera on. To learn the different in lighting techniques. Learn about IR-UV, lumens, lasers, led, flashlights, flashes and scene lights. After the PowerPoint and camera review, the student will go out to a designated dark area to practice painting with light for their future crime or traffic scenes. Students will need a camera, tripod, flash, cable release. A schrimm will be provided.	Steward Watkins Johnson	Gena Dawn Jan	Brown Sanders	King Robert
8/8/17	08:00AM	12:00PM	W-BPA-212 - Road Mapping Those Bloodstain Patterns	Bloodstain pattern documentation is a critical element in any crime scene. Without proper documentation of bloodstain patterns at the crime scene reconstruction of the event is simply not possible. This workshop will introduce road mapping techniques for the forensic practitioner and new road mapping supplies being currently utilized at crime scenes for mapping. Workshop attendees will map mock targets with a variety of bloodstain patterns. Also the attendees can test their skills by identifying the created bloodstain patterns.	Johnson	Jan	Crihton	April
8/8/17	08:00AM	12:00PM	W-BPA-520 - Designing a Case Specific Experiment in Bloodstain Pattern Analysis	Bloodstain pattern scenes are often complex and present the analyst with several questions to be answered. BPA examiners analyze scenes to determine possible mechanisms that could have created bloodstains and bloodstain patterns. At times, experimentation must be utilized, which may allow the analyst to accept or eliminate the possibility that a particular mechanism created a bloodstain pattern. This workshop will explore how to approach setting up a case-specific experiment and identify the variables present. Hands-on exercises will involve providing the attendees with bloodstain patterns and associated case information, and then working through how to identify, limit, and keep constant the variables involved in order to set up a relevant and valid experiment. 	Latham	Holly		

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8/8/17	08:00AM	12:00PM	W-CSIS-03 - CSI Series: Photographing Crime Scenes	This workshop is part of the CSI Series. This work shop is a basic application of crime scene photography using proper recording, documentation, and handling procedures of images recovered from crime scenes in accordance with accepted practices throughout the Law Enforcement and Forensic communities. Basic strategies of documentation, proper photographic perspectives, common lighting techniques, minimum equipment required, and evidentiary standards for handling digital images will be discussed and employed in a practical application. The attendee will be required to provide and be proficient in the use of their assigned photography equipment. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	Hullihan	Michael		
8/8/17	08:00AM	12:00PM	W-FWT-121 - Advanced Digital Imaging for the Footwear Examiner	This hands-on workshop was designed for footwear examiners with intermediate or advanced experience using Adobe Photoshop and familiarity with Adobe Bridge. This workshop will provide students with a standard workflow for handling images in casework, specific image-processing techniques relevant to footwear impression evidence, and techniques for creating visual aids for casework documentation and testimony. The format of this workshop is brief presentations and demonstrations followed by practical exercises.	McVicker	Brian		
8/8/17	08:00AM	12:00PM	W-LPD-138 - The Optimum Combination of Light Sources, Dye Blends, and Filters	The focus of this workshop is to maximize the fluorescence and contrast of developed latent prints with various Alternate Light Sources (ALS), RUVIS, and LASERs on a variety of substrates. With the number of dyes, dye blends, light sources and filters available, it is often difficult to choose what combination should be used to optimize fluorescence. The sequential processing recommended before and after dye staining application will also be discussed. Presentation of various dyes and/or dye blends to include RAM, RAY, MBD, Ardrex, Basic Yellow 40, Rhodamine 6G and others will be given along with a hands on opportunity to use these techniques following the discussion.				
8/8/17	08:00AM	12:00PM	W-LPI-077 - Distortion: Analysis and Discussion (Effect and Cause)	Friction ridge skin does not reproduce exactly when recorded. In almost every recording of friction ridge detail there is some type of distortion. This workshop is designed for the fingerprint specialist and especially the latent print examiner who has received training in friction ridge comparisons. It combines analysis of friction ridge detail, documentation of the observed distortion and the description of the possible causes. After a power point presentation, the students will be divided into teams and given sets of prints for analysis. They will be asked to present their analysis and conclusion to the rest of the class. The objective is for the student to analyze, document, and articulate different aspects of friction ridge distortion. Magnifiers are not needed.	Siegel	Sandy		
8/8/17	08:00AM	12:00PM	W-LPI-129 - Biological Distortion in Fingerprints	Fingerprints can display distortion due to a myriad of factors, but it all begins with the skin. Attendees will analyze and compare fingerprints displaying a variety of biological distortions (temporary damage, scars, aged skin, warts). Attendees will learn what different biological distortions look like and the skin's physiological mechanisms that cause these distortions.	White	Alice		
8/8/17	08:00AM	12:00PM	W-LPI-235A - Making Optimal Decisions in Identifications and Exclusions - A Scientific Approach	In this workshop, participants will work through a variety of examples to improve their perceptual and decision making abilities in latent print examinations. As part of their jobs, examiners must construct their own internal thresholds in relation to their peers for what constitutes an identification or exclusion. However, as an examiner improves his or her abilities, these thresholds will need to be updated. The exercises in this workshop will help each participant develop a principled technique to discover where the thresholds need to be to match their current and improving abilities. The workshop will present examples of how to avoid erroneous exclusions, which may occur in casework more often than is realized, and erroneous identifications. Finally, we will discuss how fatigue can affect both the perceptual and decision making abilities, as well as how an examiner can recognize and mitigate fatigue.	Busey	Thomas	Vanderkolk	John
8/8/17	08:00AM	12:00PM	W-PHO-119 - Forensic Photography 102	For those assigned as their agency's photographer but with little experience in the field, as well as those who are more experienced but want to improve their photography skills. Concepts include basic to "power user" camera settings, lighting, types of forensic photo equipment, photography in the pathology lab and on crime scenes, software, real-life case studies, and more. Presentation based on Nikon. Attendees welcome to bring their own gear.	Lincoln	Eric		

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8/8/17	08:00AM	12:00PM	W-PHO-154 - Conquering Difficult Injury Photography	Capturing accurate and detailed professional photographs of subtle injuries, scars, skin discoloration, or other abnormalities can often be challenging. This workshop will provide the participants with examples, demonstrations, hands-on exercises, and equipment recommendations that will help them overcome these challenges. Methods will include how to better use their lighting, obtain more accurate color, better detail, and better sharpness – all with equipment that can be carried in a camera bag.	Johnson	Eric		
8/8/17	08:00AM	12:00PM	W-TPI-029 - Advanced Tenprint Comparison Techniques	The Advanced Tenprint Comparison Technique Workshop will be beneficial to the advanced and basic friction ridge examiner. Kevin will lecture the examiners along with Power Points relative to Tenprint comparison techniques. Students will be given multiple – clues – to speed their comparisons and students will be given several practical – tests – to hone their skills. This will be valuable to those preparing for the IAI TENPRINT Certification Test. New latent examiners will also find this workshop useful. An examination magnifier will be helpful.	Burke	Kevin	Blue	Kenneth
8/8/17	08:00AM	02:30PM	W-DIG-087 - Forensic Image Comparison	"Photographic comparison is an assessment of the correspondence between features in images and known objects for the purpose of rendering an expert opinion regarding identification or elimination." SWGIT - This Workshop will expose students to the basic principles of individualization through "side-by-side" photographic comparisons and use "hands on" exercises to demonstrate the scientific method applied to it, ACE-V (Analysis, Comparison, Evaluation - Verification). Examples of photographic comparison included in this workshop will be facial comparison and comparison of objects (vehicles, clothing).	Iber	Christopher	Bruehs	Walter
8/8/17	09:00AM	12:00PM	W-ART-274 - Court and the Forensic Artist	This lecture is intended to promote discussion concerning the forensic artist and the entire court testimony experience which will include applicable victim/witness identification case law, depositions, preparation, testimony and possible game plans of both the prosecution and defense. Two completed and finalized Florida cases will be used as examples. No recording allowed.	Moody	D. Paul		
8/8/17	01:00PM	03:00PM	W-LPD-097 - Thermal Paper, Regular Paper – What’s the Big Deal?	Document examiners and forensic investigators are inundated with techniques to develop latent fingerprints impressions on porous surfaces, specifically paper. Some of these processing techniques are generally accepted while others are considered novel. Participants in this hands-on workshop will utilize a variety of processing techniques to develop latent impressions on thermal and regular paper. The results will be compared.	Knaap	Wade		
8/8/17	01:00PM	03:00PM	W-POD-065 - Introduction to Forensic Gait Analysis	Forensic gait analysis is now an established contributory option in the process of identification as part of criminal investigations. As the number of CCTV cameras in operation, and widespread use of video facilities on hand held devices, continue to increase, the use of forensic gait analysis as an aid to identification is also likely to increase. This workshop will give consideration to the evidence base for forensic gait analysis, before introducing the principles and practice. Participants will be guided through the assessment of CCTV footage for suitability for use in forensic gait analysis, and then undertake the analysis of the gait of a subject from questioned footage, and that of a suspect from reference footage. Consideration will be given to the comparison of the observations made, and how the outcomes can be appropriately conveyed in a report using verbal expressions of likelihood. By the end of the workshop participants will have a basic understanding of the theory and practice of forensic gait analysis. This workshop is aimed at delegates interested in undertaking forensic gait analysis, and those interested in using the strategy as part of criminal investigations.	Birch	Ivan	Reidy	Selina
8/8/17	01:00PM	04:00PM	W-DIG-058 - iPhone, iPad and Smartphone "Apps" for Crime Scene Investigations	As a technology follow-up to the two (2) standing-room-only presentations at Sacramento in 2015, this workshop will again introduce and demonstrate the emerging field of smartphone utilization in criminal investigations and forensic documentation. The workshop will discuss phones, tablets, built-in functions and "Apps" suitable for forensic documentation, add-on hardware, agency policies and Daubert/Frye requirements. Attendees will be encouraged to bring their phones and participate in mock crime-scene documentation efforts.	Wyman	Robert	Stringham	Larry
8/8/17	01:00PM	04:00PM	W-TPI-553 - Ten Print Certification Test Preparation	This is a comprehensive workshop that will prepare the student to take the certification test. We will review the requirements and practice with exercises to sharpen the students skills.	McDonnell	Owen	Punter	Ann
8/8/17	01:00PM	05:00PM	W-BPA-150 - Bloodstains on Fabrics and the use of an ALS	This 3 hr workshop dwells into concepts regarding the visible light spectrum and the components behind the manufacturing of various fabrics. The theoretical discussions lead into a hands-on exercise on difficult to see bloodstained textured and colored fabric samples. Different wavelength of lights best suited for the recovery of bloodstains will be used. This workshop was created for the beginner and could constitute as a refresher for someone versed in the subject matter. Enrollment is limited to 24	Moore	Craig		

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8/8/17	01:00PM	05:00PM	W-CSI-211 - Trajectory of Vehicles: Rods, Strings and Lasers	This workshop will introduce techniques required to analyze shooting trajectory evidence recovered in vehicles that are involved in shooting related incidents. Proper trajectory analysis of firearm related evidence recovered in vehicles is critical to analyzing every piece of the puzzle and for attempting to determine the approximate positions of victims, witnesses, and suspects, as well as the chronologic sequence of events. This workshop will provide the forensic practitioner with hands-on experience by practicing trajectory reconstruction techniques in mock crime scene vehicles containing shooting incident evidence.	Johnson	Jan	Goudeau	Jeff
8/8/17	01:00PM	05:00PM	W-CSI-286 - Staged Crime Scenes: Crime Scene Clues to Suspect Misdirection of the Investigation	A staged crime scene is altered to mislead a police investigation or for other reasons understood only by the offender. Recognizing staged scenes are possible in nearly every type of criminal offense, this workshop introduces three categories of staged scenes based on the motive of the offender's alteration and explains how staging can be identified through altered flags that are often found when scenes are altered, along with investigative considerations when investigating potentially staged crimes.	Graham	Grant		
8/8/17	01:00PM	05:00PM	W-CSIS-04 - CSI Series: Bloodstain Pattern Analysis	This workshop is part of the CSI Series. This workshop is designed for crime scene technicians, medical examiner investigators, detectives and others associated with crime scene investigation, as well as those who have previous training in bloodstain pattern recognition and want a "refresher". This workshop will provide hands-on instruction in identification of bloodstain patterns, proper bloodstain pattern terminology and documentation of bloodstains found at the crime scene. While this workshop will not make the participant an expert in bloodstain pattern analysis, it will allow them to understand bloodstain patterns and how they are created. Attendees need not have previous training in bloodstain pattern analysis. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	Graff	Gary	Graff	Iris
8/8/17	01:00PM	05:00PM	W-FWT-192 - Introduction to Footwear Examination	Attendees will be introduced to footwear examination through lecture and hands on comparison exercises. They will also be instructed on the comparison process and the varying levels of association in footwear examinations. The class will introduce manufacturing and variations created from the various processes. This workshop will also instruct on the value/weight given to design, size, wear, and randomly acquired characteristics. Upon completion, attendees will understand the requirements to become trained as a footwear examiner.	Mueller	Ronald		
8/8/17	01:00PM	05:00PM	W-LPI-072 - What if I Don't Agree? Approaches to Conflict Resolution in Latent Print Analysis	Disagreements over conclusions may lead to conflict between examiners. What should a Technical Leader/Supervisor do when one examiner has identified a latent print that another deemed inconclusive? This presentation will address different conflict resolution processes adopted by two Arizona agencies. Workshop participants will compare difficult latent prints. Latent prints that have resulted in disagreement or have gone through a conflict resolution process will be examined.	Dechant	Penny	Conner	Heather
8/8/17	01:00PM	05:00PM	W-LPI-089 - It's All Greek To Me!	What is a latent print? What is ACE-V? How does AFIS work? One of the most challenging aspects of courtroom testimony is explaining complicated scientific concepts to the layperson. Communicating your science effectively gives you confidence. The inability to explain scientific concepts can leave jurors confused and indifferent, thinking, "It's all Greek to me!" In this workshop, we practice teaching techniques to help you concisely and effectively explain complicated scientific concepts to the layperson.	Daluz	Hillary		
8/8/17	01:00PM	05:00PM	W-LPI-180 - Universal Latent Workstation (ULW) - The Basics	This workshop will focus on the features and functionality of the Universal Latent Workstation (ULW) software. The ULW software offers users a variety of case management and processing tools and will enable latent examiners to search the FBI's Next Generation Identification (NGI) by finger, palm, or supplemental images. This session will primarily focus on the use of the software as it relates to latent fingerprint transactions. Some of the information covered in this session includes: managing transactions, encoding minutiae points, adjusting file penetration, designating repositories for searches, and conducting comparisons of fingerprints with possible candidates returned from the NGI. This workshop is designed for Latent Print Examiners who are new to the ULW software and enter latent prints in the ULW for search through the FBI's Biometric Repository.	Morgan	Phillip D.	Bolyard	Kimberly
8/8/17	01:00PM	05:00PM	W-LPI-829 - Biological Distortion in Fingerprints	Fingerprints can display distortion due to a myriad of factors, but it all begins with the skin. Attendees will analyze and compare fingerprints displaying a variety of biological distortions (temporary damage, scars, aged skin, warts). Attendees will learn what different biological distortions look like and the skin's physiological mechanisms that cause these distortions.	White	Alice		

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8/8/17	02:30PM	06:30PM	W-FAC-173 - Face Comparisons using Facial Recognition Systems	Although facial identification (FI) has been used in government and law enforcement applications for decades, the widespread use of facial images for automated facial recognition (FR) systems is more recent. This workshop is designed for face examiners to perform morphological analysis using a check list of facial features when utilizing a FR system that provides a candidate gallery. The workshop will breakdown the facial features to help find the details to aid in making a face comparison and narrow down the candidates.	Pastorial	Rachel
8/8/17	03:30PM	05:30PM	W-LPD-696 - Developing latent prints on firearms, cartridges and spent cartridge cases does anything really work	Latent print examiners are continually getting questioned on why we don't develop prints on these items. This workshop will look at commonly used and novel techniques available for processing and review some recent publications.	Knaap	Wade
8/9/17	10:00AM	12:00PM	W-BPA-519 - Swipes, Wipes and Transfer Stains	Swipes, wipes, and transfer bloodstain patterns are the more common patterns found at crime scenes. This workshop will explore these various bloodstain pattern types and provide attendees more insight as to how to recognize them, what information they can provide and the mechanisms that create them.	??	
8/9/17	10:00AM	12:00PM	W-CSIS-05 - CSI Series: DNA Collection	This workshop is part of the CSI Series. In this workshop you will learn how to properly collect and package DNA evidence from crime scenes and how these crucial activities align to DNA results. The downstream implications will be discussed from the context of a DNA results obtained. You will learn what it means when a sample is degraded or poor quality, and low quantity. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	O'Dell	Steven
8/9/17	10:00AM	12:00PM	W-CSIS-06 - CSI Series: Basic Crime Scene Diagramming	This workshop is part of the CSI Series. This is an introductory workshop to crime scene mapping and diagramming of indoor and outdoor crime scenes. Attendees will create a diagram from previously recorded scene data (baseline and total station). The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	Allard	Michael
8/9/17	10:00AM	12:00PM	W-LLS-198 - Succeed with your Strengths	Do you know what you are best at? Do you understand how to communicate your value in project meetings, performance evaluations and promotion discussions? People who focus on their strengths are much more successful than those who focus on weaknesses. Come to this session to learn where to focus your energies to get the most out of your career and reach your professional goals.	Greene	Jennifer
8/9/17	10:00AM	12:00PM	W-LPD-091 - Taking the Latent Fingerprint Lab into the Field pretty much anything goes!	Arguably it can be said that latent fingerprint processing in the field is better than removing evidence to the laboratory. Evidence can be compromised or degraded through transportation to the lab. This workshop will look at mobile processing techniques that can be taken outside the lab and used in the field; how to MacGyver processing and apply it in the field.	Knaap	Wade
8/9/17	10:00AM	12:00PM	W-LPI-084 - Making a latent print court chart Workshop	The students will begin by processing the images to be used in the court chart, making the court chart and formatting the court chart for output to a printer, a multipage PDF file and as a PowerPoint presentation. Each student will be provided a DVD with the original files used in this workshop and instructions covering the processing steps.	Sanders	Robert
8/9/17	10:00AM	12:00PM	W-LPI-142 - Crease and Third Level Ridge Details Workshop	This workshop will include a discussion of unique natural patterns, the examination process, and practical examinations of friction skin impressions to determine the sources. These exercises will emphasize details of crease and third level friction skin features. After completion of this workshop, the participants should have better confidence in using all levels of details of crease and friction skin features. Previous experience in comparative science is beneficial for the participant.	Vanderkolk	John

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8/9/17	10:00AM	12:00PM	W-POD-067 - Intermediate Forensic Gait Analysis	Forensic gait analysis is now an established contributory option in the process of identification as part of criminal investigations. As the number of CCTV cameras in operation, and widespread use of video facilities on hand held devices, continue to increase, the use of forensic gait analysis as an aid to identification is likely to increase. This workshop follows on from the "Introduction to Forensic Gait Analysis" workshop, and will give detailed consideration to the process of identifying and describing features of gait from CCTV footage. Consideration will be given to the effect of factors such as camera angle and frame rate on the identification of features of gait. By the end of the workshop participants will have an understanding of the practicalities and limitations of identifying particular features of gait from CCTV footage. This workshop is aimed at delegates who have either already undertaken the "Introduction to Forensic Gait Analysis" workshop or have experience in observational gait analysis, and are intending to undertake forensic gait analysis or commission such work as part of criminal investigations.	Birch	Ivan	Reidy	Selina
8/9/17	10:00AM	12:00PM	W-TPI-552 - Legal Side of Tenprint Case Law	This workshop will discuss a Tenprint case like in court, it will prepare the student for a prior's case testimony, where a defendant will be fingerprinted and a comparison will be made. In addition a testimony will be provided by the examiner.	McDonnell	Owen	Moore-Collins	Amanda
8/9/17	10:00AM	03:30PM	W-BIS-176 - Understanding the FBI Identity History Summary "External Next Generation Identification (NGI) Response	This course provides an understanding of the FBI Identity History Summary (IdHS) generated as a result of an NGI fingerprint search. The topics covered include the fields, codes, and abbreviations the FBI uses to enter data. Additionally, the course emphasizes the importance of the IdHS to both criminal and civil applicant agencies, as well as the importance of submitting dispositions to complete the FBI record. NOTE: This course is NOT "Understanding the NCIC Record." However, certain aspects of the NCIC record will be covered.	Knotts-Gladwin	Christina		
8/9/17	10:00AM	05:00PM	W-ART-508 - Creating Composite Images with Adobe Photoshop and Bridge	Photoshop has become the worldwide-dominant image editing software, developed by the American company Adobe Systems. Although not specifically developed for composite imaging, due to its mostly superior editing tools, it is qualified to aid in creating forensic composite images. Adobe Bridge was primarily developed as a media manager for photographers and designers. One of the functions allows the user to create keywords and assign them to images, which can then be researched and selected. This makes it possible to either call up individual facial features separately or to select images according to age, gender, phenotype or any other characteristic necessary. Individuals can use Bridge as a management database for multitudes of basis images which serve can as templates for the witnesses being interviewed. This workshop will show students how to organize their own basis images with Adobe Bridge and the tools to creating composites with Adobe Photoshop. Comfortable working-level experience with Photoshop is required.	Wortman	Thomas		
8/9/17	01:00PM	03:00PM	W-POD-068 - Advanced Forensic Gait Analysis	As forensic gait analysis becomes more widely used as evidence in legal proceedings, greater emphasis will be placed on the quality of the contemporaneous notes taken during the analysis, the reports produced for court and the way in which the weight that can be placed on the outcomes has been established. This workshop follows on from the "Introduction to Forensic Gait Analysis" and "Intermediate Forensic Gait Analysis" workshops. The workshop will consider methods of note taking and recording while analysing footage, the development and use of features of gait databases to aid in determining the weight that can be placed on the outcomes, and the construction of reports for court use. It will consider the nature and structure of forensic gait analysis reports, and what factors make a report easily understandable and fit for purpose. By the end of the workshop participants will have an understanding of the principles of forensic gait analysis note taking and report writing, and the appropriate use of databases. This workshop is aimed at delegates who have either already undertaken the "Introduction to Forensic Gait Analysis" and "Intermediate Forensic Gait Analysis" workshops or have extensive experience in observational gait analysis, and are intending to undertake forensic gait analysis or commission such work as part of criminal investigations.	Birch	Ivan	Reidy	Selina
8/9/17	01:00PM	05:00PM	W-GEN-188 - The use of alternate light sources and ParaDNA for screening biological fluids	Alternate light sources are tools that allow examiners to locate and process otherwise invisible evidence that includes fingerprint evidence, trace evidence (hairs, fibers, gunshot residue, and body fluids), and bodily injuries. Biological fluids typically require additional screening to be completed before proceeding with STR analysis. In this workshop we will discuss alternate light source examination as the first, presumptive stage of the screening process followed by an innovative way to profile, screen and/or triage biological samples as a confirmatory test before STR analysis. Handouts will be provided and practical exercises will be conducted.	McWhorter King	Allyce Roberto	Cole	Jason

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8/9/17	02:00PM	04:30PM	W-LPI-182 - Scientific Basics of Palm Prints Recording	This workshop will provide the participants with suggestions for recording legible palm prints, along with recommended techniques. It will also provide information regarding best practice guidelines for successful enrollment into the National Palm Print System (NPPS) as a 4 image or 6 image Type 15 record.	Morgan	Phillip D.		
8/9/17	02:00PM	04:30PM	W-LPI-842 - Crease and Third Level Ridge Details Workshop	This workshop will include a discussion of unique natural patterns, the examination process, and practical examinations of friction skin impressions to determine the sources. These exercises will emphasize details of crease and third level friction skin features. After completion of this workshop, the participants should have better confidence in using all levels of details of crease and friction skin features. Previous experience in comparative science is beneficial for the participant.	Vanderkolk	John		
8/9/17	02:00PM	05:00PM	W-BPA-521 - A Taxonomic Methodology for Bloodstain Identification and Scene Processing	Trained and experience bloodstain pattern analysts use methodologies for identifying, classifying, and documenting blood shed scenes. These analysts depend on their training and experience to ensure proper identification of bloodstain patterns during a scene analysis or reconstruction. A question often arising when the processing agency has a blood scene and no bloodstain expert is, "How to properly document the bloodstains?" This workshop provides valuable information regarding proper bloodstain identification using a taxonomy, which details the individual stain characteristics. Understanding these characteristics affords the crime scene analyst an ability to identify and properly document a blood scene and offer a trained bloodstain analyst appropriate photographs and reports for use when a complete reconstruction of the scene would benefit the investigation.	Priest	Johnathan		
8/9/17	02:00PM	05:00PM	W-CSIS-09 - CSI Series: Detection and recording of 2 dimensional and 3 dimensional footwear and tire impression evidence	This workshop is part of the CSI Series. This workshop provides an overview of best practices in the detection and recording of 2 dimensional and 3 dimensional footwear and tire impression evidence. Demonstrations on how to determine the most effective searching and enhancement methods in relation to the specific conditions of the scene and exhibits being processed will take place, along with the opportunity to apply some of the methods demonstrated. Basic to advanced photographic methods designed to capture the highest level of detail available from the enhancement processes used will also be demonstrated, along with demonstrations of lifting and casting of impression evidence. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	Percy	Lucas		
8/9/17	02:00PM	05:00PM	W-LLS-197 - Improving Team Results by Focusing on Strengths	Do you manage a team? Do you know how to get the best out of each individual? Does your team work together as well as you need them to? Come to this session to learn how you can improve the results of a team by focusing on strengths.	Greene	Jennifer		
8/9/17	02:00PM	05:00PM	W-LPI-039 - Latent Comparison Software for the Forensic Examiner	Comparator software significantly reduces the time it takes to enhance, calibrate, compare, and analyze fingerprints and other forensic images. This workshop will use software that will allow the student to accurately compare and prepare court charts faster than ever before. This workshop will include: Scale images Adjust contrast levels Perspective correction Save workspace Side-by-side rotational alignment Adjust color sliders Crop, zoom, or pan across side-by-side images simultaneously Produce magnified views Export and save all images from a NIST file Add dimensions/measurements to images	Watkins McDonnell	Dawn Owen	Brown	King
8/9/17	02:00PM	05:00PM	W-PHO-240 - Imaging the Unseen with Digital Ultraviolet (UV), Visible (VIS) and Infrared (IR) Technology: Preliminary Bruising and Tattoo Studies	After attending said session, attendees will come away with a better understanding of the electromagnetic spectrum and how the infrared (IR), ultraviolet (UV), and visible (VIS) portions of it can cause different types of evidence to absorb (darken), luminesce (fluoresce), reflect (lighten), and/or transmit (disappear). In particular, the authors' preliminary research findings on revealing and documenting both fresh and healed bruising and removing and/or darkening tattoos will be discussed. This workshop aims to highlight the possible evidentiary results that can be obtained through the use of said techniques and how easily they can be accomplished with full spectrum digital cameras. Successful results were obtained with each tattoo and bruise tested. Of particular note, is a case where the bruise was revealed seven months after it had disappeared from human sight. It is clear that the referenced techniques have yielded impressive results and would prove beneficial at both the investigative and prosecutorial stages. This presentation and the research proposed within it will affect the forensic community by demonstrating the need for the everyday use of IR, UV, and VIS photography, the ease with which these techniques can be accomplished via digital photography, and the possible success that can be achieved by revealing and documenting evidence that often goes unnoticed.	Hoffman	Stephanie		

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8/9/17	02:00PM	05:00PM	W-TPI-028 - Moot Court for the Tenprint Examiner	The Tenprint examiner will receive a lecture on the history of prosecution in the U.S. court system and then will be asked to participate in a "Moot Court." The prosecution and defense council will question the examiner as to their findings in a fictitious case. The Tenprint examiner will have the option to have their "Moot Court" recorded and it can be submitted to the IAI Tenprint Certification Board to satisfy the Moot Court requirement.	Burke	Kevin	Bolyard	Kimberly
8/9/17	02:00PM	05:00PM	W-TPI-163 - Unique Way of Taking Major Case Prints	Major Case Prints are an important part of any investigation involving fingerprints lifted from various crime scenes. This workshop will show a unique way of taking major case prints using black magnetic powder, vinyl lifters and clear plastic background. This technique enhances the ability to produce ridge detail in the fingertip area, joints and palm prints normally not seen in standard techniques. This course is open to latent print examiners, ten print examiners and crime scene technicians.	Hentges	Kathy		
8/9/17	02:30PM	04:30PM	W-LPI-265 - Making Sense of the Statistics in the PCAST Report	This workshop will focus mainly on the fingerprint portions of the 2016 PCAST report, although some discussion of the other disciplines will be required. The aim of the workshop is to provide the student with an understanding of: 1) what statistics are being discussed in PCAST, 2) How those statistics were derived, and 3) How those statistics could be addressed in testimony. This is an advanced workshop and requires the student to have some basic understanding of error rates and the error rate studies that have been performed in the field of Fingerprints.	Langenburg	Glenn		
8/10/17	08:00AM	12:00PM	W-BPA-205 - Examination of Bloodstains and Bloodstain Patterns on Clothing	The role of the bloodstain pattern analyst does not stop with the documentation of bloodstain patterns at the crime scene. The examination of bloodstained clothing (fabric) may provide a wealth of information with respect to both victims and suspects. What was the position of the victim at the time of bloodshed? Do the bloodstains support or refute suspects' statements of their reported actions? Examination of bloodstained clothing can challenge the bloodstain pattern analyst. Issues involving contamination, fabric texture, and pattern identification are all problems that the analyst must contend with. This workshop will give insight into the proper preservation of bloodstained clothing and other fabric, and documentation of the same through sketches, notes, and photographs. This insight continues with pattern identification, reconstruction and assistance to the forensic biologist in determining which bloodstains to collect for biological examination. Those participating will have the opportunity to examine clothing samples for bloodstains and bloodstain patterns, directionality and the effects of fabric texture. Participants may bring cameras for photographing their documentation of the clothing examples.	Griffin	Tom		
8/10/17	08:00AM	12:00PM	W-BPA-241 - Fluid Dynamics as it Relates to Dripping Blood	Bloodstain pattern recognition and identification are important elements when attempting to reconstruct the events that occur at violent crime scenes. This workshop will provide hands-on experience with scientific experiments that demonstrate the final appearance of blood on various targets. These practical exercises demonstrate the fluid dynamics of dripping blood as it falls from various heights, different angles, and on various target surfaces/texture considerations. Bloodstain pattern case studies will also be presented in this workshop.	Johnson	Jan		
8/10/17	08:00AM	12:00PM	W-CSI-177 - The Use of Liquid Latex for Soot Removal in Arson Evidence Latent Print Processing	Arson evidence can be tricky to process for latent prints and other types of evidence due to the covering of soot. Methods of soot removal to include rinsing, and the use of mildly adhesive tapes have been used with marginal success. This workshop will provide hands on training with utilizing liquid latex to remove layers of soot from fire debris to reveal latent print and blood evidence from underneath.	McIntyre	Andrew	Burnette	Ira
8/10/17	08:00AM	12:00PM	W-CSIS-08 - CSI Series: Latent Print and Firearms Evidence at the Scene	This workshop is part of the CSI Series. This workshop on Latent Print and Firearms evidence is an introductory on the processing of this evidence at crime scenes. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed. 	Shouldice	Ronan		
8/10/17	08:00AM	12:00PM	W-FWT-049 - Examination and Comparison of Tires, Tire Treads and Tire Tracks	This workshop will provide an overview with both lecture and hands on exercises of the proper methods and techniques in the examination and comparison of tires, tire treads, and tire track evidence. There will be various discussions related to the proper techniques and methodologies in the examination and comparison process. There will be heavy discussions on the manufacturing of tires and tire tread designs and how it pertains to the comparison process. Numerous practical exercises both in class and outside of the classroom are utilized and implemented to emphasize and critique the skills of the students to properly perform this level of training in tire track science.	Hilderbrand	Dwane		

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8/10/17	08:00AM	12:00PM	W-GEN-262 - Statistical Thinking for Forensic Practitioners	The field of statistics is concerned with the collection, display, analysis, interpretation, and reporting of quantitative data. Statistics has emerged as a critical topic in ongoing discussions regarding the practice of forensic science. The workshop provides an overview of probability and statistics ideas that are relevant for forensic practitioners and discusses applications of statistics in forensic examinations. Topics include data collection, statistical hypothesis tests, reproducibility, reliability, likelihood ratios and Bayesian inference.	Stern	Hal	Carriquiry	Alicia
8/10/17	08:00AM	12:00PM	W-LPI-071 - Reducing Erroneous Exclusions: The Workshop!	Latent print research shows that erroneous exclusions are common and inevitable. What exclusion training have you had? What is sufficient? What is your lab's standard? Is your lab implementing any new policies? This workshop will review policy changes that AZDPS has implemented to reduce erroneous exclusions. Examples of errors will be presented along with information on what might make an erroneous exclusion more likely. Hands-on comparison exercises will demonstrate a practical approach to exclusion decisions.	Dechant	Penny		
8/10/17	08:00AM	12:00PM	W-LPI-139 -Standing on the cutting edge of forensics, taking steps towards the future.	Recent developments in the forensic sciences have led to a change in expectations. Long gone are the days of "trust me I'm an expert" and "identification to the exclusion of all others." Instead, we are in an age of statistical terms such as likelihood or probability, of associative wording, and automation. How can today's practitioners deal with such expectations that were not part of their initial training curriculum? Which recent studies and resources best assist in bridging the link between what we've always said and done and what is expected of us now and possibly in the future? What steps have forensic laboratories taken to embrace these shifting needs? In this workshop, latent print examiners from the DFSC will discuss the transition they took to embrace (however firmly) cutting edge innovations. From topics such as "associative wording" to statistical software and examination automation to active case management "it will be encouraged for attendees to voice their own concerns and ask questions about the process from there to here and possibly to the future. To assist in illustrating and illuminating these changes, a variety of pertinent research, articles, and resources will be provided to attendees to help them navigate the path forward.	Wortman	Thomas	Hall	Molly
					Gill	Kalisha		
8/10/17	08:00AM	12:00PM	W-LPI-278 - Comparison of Plantar Friction Ridge Impressions - Workshop	Due to their infrequent submission into forensic laboratories, friction ridge impressions originating from the foot/sole that have been recovered at the scene of a crime can challenge even the most tenured comparison analyst. This four-hour workshop is designed to provide the participant with the biological fundamentals, legal admissibility scenarios and a tangible practical comparison experience with plantar friction ridge impressions. This workshop will not address classification or recording techniques. Each examiner will need to bring a magnifying glass.	Stimac	Jon T.		
8/10/17	08:00AM	12:00PM	W-PHO-107 - Advanced Digital Imaging Workshop	Participants will have a more comprehensive working knowledge of Adobe® Photoshop® CC. In particular, attendees will have an understanding of advanced procedures used in forensic digital imaging (e.g. working with multiple layers, creating overlays and more), as well as how to apply those concepts in the documentation of ACE-V and comply with ISO guidelines. This class is "hands-on" training. All students will participate in exercises to ensure the required learning objectives were achieved.	Greene	Stephen		
8/10/17	08:00AM	05:00PM	W-ART-168 - Sculpting the Human Skull	Upon the completion of this workshop the students will gain a greater appreciation and understanding of the exterior surface anatomy of a female and/or male skull. By actively engaging in the sculpting modelling processes (both additive and subtractive)the students will come to know and tactilely feel the organic flow of the skull's anatomy.	Marion	Daniel		
8/10/17	08:00AM	05:00PM	W-BPA-151 Part 1 - A Courtroom Appropriate Demonstrative Aid For Bloodstain Pattern Examiners	NOTE THIS COURSE IS 8-5 THURSDAY 8/10 AND 10:30 TO 12 ON FRIDAY 8/11. This series of three workshops totaling 10 hours (4+4+2) will create a theoretically rich, experimentally based demonstrative aid suitable for presentation before the courtroom or classroom. This 10" x 14" wood board model depicts a spatter pattern and illustrates both the 2 - Dimensional Area of Convergence and the 3 - Dimensional Area of Origin. Experimentation will involve laboratory collected bovine blood. Workshop is designed for current BPA practitioners.	Moore	Craig		
8/10/17	01:00PM	04:00PM	W-CSI-036 - Using Luminol & BlueStar Forensic for the Identification of Possible Blood Stains at the Crime Scene	This workshop involves the processing of possible blood stains using Luminol and BlueStar Forensic and a comparison of the two chemicals. Luminol requires total darkness and cause much difficulty in photographic capture. The students will conduct processing comparisons of BlueStar Forensic and Luminol on blood stains. Students will test Luminol and BlueStar Forensic. Photographic techniques to capture the bioluminescent reaction are discussed and practiced. Student should bring a digital camera, tripod and cable release.	Watkins	Dawn	Brown	King
					McDonnell	Owen		

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8/10/17	01:00PM	05:00PM	W-CSI-120 - Circle of Life: Circle of Death (4-hour workshop for Crime Scene Investigators & General Forensics)	This 4-hour workshop is designed for those interested in developing skills in medicolegal death investigation and/or body recovery. Forensic taphonomy, the processes of postmortem changes and decomposition, can be used as physical evidence in a forensic investigation. Taphonomic changes and decomposition stages will be covered along with the environmental factors that affect decomposing remains. Case reports and methods for locating clandestine graves will also be covered, including the use of a specialized forensic tool.	Carter	David	Stejskal	Susan
8/10/17	01:00PM	05:00PM	W-CSI-145 - Forensic Mapping of Crime Scenes	This workshop will highlight mapping methodology, and will provide hands on 3D crime scene mapping. Attendants will learn baseline coordinate, triangulation, polar coordinates, and use of a compact mapping station for proper scene documentation.	??			
8/10/17	01:00PM	05:00PM	W-CSI-162 - Latent Print 101 for the Non Examiner	Trying to connect a suspect to a crime or eliminate them from further consideration is the reason agencies process so many crime scenes. Among all of the potential physical evidence that can be collected, latent prints do the job of establishing links to possible suspects better than any other physical evidence because of their unique ability to be searched through an AFIS system against millions of possibilities. This workshop is designed for crime scene technicians, detectives/investigators and their supervisors, attorneys and others associated with crime scene investigations to better understand this powerful type of evidence. Many facets of this important field will be presented in a "hands on" fashion during the workshop.	Campbell	Michael	Dew	Brian
8/10/17	01:00PM	05:00PM	W-CSIS-07 - CSI Series: Detection and Collection of Trace Evidence from Vehicles	This workshop is part of the CSI Series. This workshop will extend the examiners ability to detect, collect and preserve less commonly encountered evidence types in and outside of vehicles such as soil, building materials, vomit, botanicals, explosive residue, airbags, stains/smears, vehicle lamps, fiber-plastic fusions and impressions. A vehicle will be available on-site for practical demonstrations and exercises. Basic methods used in collection will be discussed and demonstrated including picking, lifting, scrapping, cutting, sweeping, and vacuuming. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. Note that the orientation on Monday (W-CSIS-01) is required to participate in the Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops such as this one may be taken as needed.	Schneck	William		
8/10/17	01:00PM	05:00PM	W-FWT-179 - 3D-Forensics - Mobile 3D-Scanner + 3D data analysis for footwear/tire impression evidence	The workshop presents the 3D-Forensics mobile high-resolution 3D scanning prototype system for the recovery and analysis of footwear and tire track impression evidence. It is geared towards both impression examiners and crime scene investigators. The first part presents the 3D-Scanner and the second part presents the 3D analysis software. Participants have the opportunity to use both the scanner and the software. Active feedback is requested as input into the next version of the system.	Chiamone	Tiziana	Crabbe	Stephen
8/10/17	01:00PM	05:00PM	W-LPI-130 - Latent Print Training Programs - Building Your Lab's Future	This workshop will serve as a round-table discussion with active dialogue and brain-storming about the best ways to build an effective and defensible training program. Facilitated discussions will draw out the critical knowledge, skills, and abilities that need to be developed during training, methods to impart these knowledge, skills, and abilities to a trainee, and methods for measuring the trainee's acquisition of these knowledge, skills, and abilities.	White	Alice		
8/10/17	01:00PM	05:00PM	W-LPI-185 - Latent Print Testimony: how to be transparent without feeling naked	Since the 2009 NAS report, changes to the expectations of latent print testimony have multiplied. A trend away from dogmatic statements of fact toward transparent statements of data-supported opinion has left many latent print examiners struggling with the transition. This workshop considers some of the tough concepts that come up in court including error rate, discriminability, certainty, variability, bias, uniqueness, and the identification decision. It will demonstrate one way to present findings without feeling exposed.	Eldridge	Heidi		
8/10/17	01:00PM	05:00PM	W-LPI-263 - An Overview of the ACE-V Process	This workshop is a basic introductory workshop into the ACE-V process—the generally accepted protocol for comparing impression evidence. This workshop will explore the use of ACE-V (Analysis-Comparison-Evaluation-Verification) applied to friction ridge examination. We will review the each stage of ACE-V and the critical decisions that must be made in each stage. Lastly, we will explore documentation, quality assurance and reporting practices that meet the current SWGFAST standards.	Langenburg	Glenn		
8/10/17	01:00PM	05:00PM	W-TPI-079 - Fingerprint Pattern Interpretation: A lost art form?	With AFIS automation we no longer use the Henry Classification System for filing, but it is still important to know pattern interpretation either to articulate what you see or for AFIS systems that require a pattern type. This will also be beneficial for examiners preparing for the pattern interpretation portion of the IAI certification test, or if you are like me, you just miss it and want to go down memory lane. The presentation will be from the "The Science of Fingerprints" as published by the U.S. Department of Justice (Green Book). No magnifiers will be needed.	Siegel	Sandy		
8/11/17	10:00AM	12:00PM	W-TPI-550 - Perfecting your skills: A classification Systems refresher for ten print examiners	This is a workshop that will help the students to refresh their Henry classification skills.	Punter	Ann		

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8/11/17	10:00AM	01:00PM	W-LPI-181 - Universal Latent Workstation (ULW) - Intermediate/Advanced	This workshop will focus on the features and functionality of the Universal Latent Workstation (ULW) software. The ULW software will enable latent examiners to search the FBI's Biometric Repository by finger, palm, or supplemental images. This session will primarily focus on the use of the software as it relates to latent palm print transactions and administrative functions. Some of the information covered in this session includes: encoding minutiae points, adjusting file penetration, designating repositories for searches, and conducting comparisons. This workshop is designed for Latent Print Examiners who are experienced with the ULW software (versions 6.0 and newer), and enter latent prints in the ULW for search through the FBI's Next Generation Identification (NGI).	Bolyard	Kimberly	Morgan	Phillip
8/11/17	10:00AM	03:00PM	W-CSI-203 - Uncommon Methods for Common Forensic Evidence	In this workshop you will be introduced to the practical use of different techniques used in Sweden and how they were applied in real cases. We will address both detection and recovery of the impression evidence, and the conclusions made from the comparison. Each student will have a chance to practice the techniques on different types of evidence. Snow Impressions: We will cast impressions in snow with a new method called "Dry Casting Technique". We use a new type of plaster with extreme short setting time. To increase the contrast in the impression we brush a new type of powder on to the surface before photographing or casting. The result is mostly with a higher contrast and a larger number of details, especially on wet transparent snow. All photographed three-dimensional impressions from the crime scenes should not be compared with a two-dimensional test print from a suspected shoe or tire. The correct method is to compare with a three-dimensional test impression. We will show a technique to make these types of test impressions and the best way to photograph it. Invisible Marks in Plastic Bags: The comparison of plastic bags is one of the most common evidence in drug cases. If you find drugs packed in a plastic bag and later you will find a roll bags, of the same type, in a suspected person's home. We will show different methods to prove that the plastic bag with the drugs is from the found roll. Two polarizing filter sheets and under light will make the invisible manufacturing marks in plastic bags visible and give you a chance to link them to a specific roll. We will discuss the level of	Carlsson	Jens	Carlsson	Kjell
8/11/17	10:00AM	03:00PM	W-LPI-161 - Palm Print Orientation and Comparison Techniques	This workshop will bring you the original time tested palm print clues that get the job done but in a new interactive digital format and some new material. Many examiners struggle with palm print orientation and comparison because they do not know or are "rusty" using the correct clues. You will learn how to recognize the numerous "position orientation clues" that normally appear in palm prints and how to "search smart not hard".	Counts	Kelley	Jordahl	Mike
8/11/17	10:00AM	03:30PM	W-BPA-062 - Photographing the Blood-Letting Event Scene	You have just spent three hours mapping your bloodstain event and you've got a limited amount of time to get the perfect photographs to satisfy the demanding standards of your bloodstain pattern analyst. Welcome to the Photographing the Blood-Letting Event Scene workshop. This workshop is designed with the crime scene or laboratory technician in mind. We will explore the techniques needed to photograph simulated blood stained crime scenes to ensure that our photographs are sharp, focused, parallel and perpendicular and free of defects that make bloodstain pattern analysis using crime scene photographs difficult. We will also take a look at actual crime scenes that were poorly photographed and discuss the potential problems that the bloodstain pattern analyst must overcome in courtroom testimony.	Doglietto	David	Hullihan	Michael
8/11/17	10:00AM	03:30PM	W-CSI-160 - Helping CSI's Make Good Decisions on Latent Prints of "Value"	Have you been unfairly labeled as someone who always submits junk - that then clogs up the "system"? The job of a CSI is complicated and difficult enough without adding the stress of submitting latent print impressions that are returned labeled "NO VALUE". It takes years to train a Latent Print Examiner how to determine value, so how is a hard working CSI supposed to magically know. Help your examiners to make your day by identifying more of the prints that you submit by learning a few of the critical things necessary for the examiner to see "value" in the prints that you submit. Learn to reasonably see a print of NO value and lessen everyone's workload including your own.	Campbell	Mike	Dew	Brian
8/11/17	10:00AM	04:00PM	W-ART-284 - The Composite Sketch - a diagnostic tune up	Attendees will assess broadly-seen issues with the composite drawing and its process. Common issues will be identified and discussed; solutions will be offered through interactive demonstration and practice by the attendees. Practical implementation will include alternatives/solutions to consistent layout & format, drawing methodology, and tips & tricks. Students should bring their own preferred drawing supplies to class; intermediate experience preferred.	Way	Duncan		

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8/11/17	10:00AM	04:00PM	W-CSI-153 - Mobile analytical tools: achieve better strategies for gathering and analyzing evidence in the field	After this presentation, attendees will understand the basic scientific methodology used in the forensic examination of unknown substances, biological evidence, and friction ridge evidence. Attendees will hands on learning with advanced technologies utilized in forensic examination. This presentation will impact the forensic science community by demonstrating the importance of using the best analytical practices in the scientific analysis of evidence in the field to achieve faster and better informed scene investigations.	Kessler Lothridge	Michael Kevin	Massey	Peter
8/11/17	10:00AM	04:00PM	W-CSIS-02 - CSI Seres: Crime Scene Processing Practical (Part 2 of 2)	This workshop is part of the CSI Series. The CSI Series is a set of workshops that can be taken in total or in parts, over the course of the conference. The orientation on Monday (W-CSIS-01) is required to participate in this Crime Scene Processing workshop Friday (W-CSIS-02). Completion of specific discipline workshops related to this series (all listed as W-CSIS) may be taken as needed. Other series workshops offered during the conference include: photography, scene mapping, latent print development, footwear impression collection, bloodstain pattern analysis, trace and DNA evidence collection. This workshop Friday will allow application of the student's learning to the processing of mock crime scenes. Camera and tripod are required.	Burt	Timothy		
8/11/17	10:00AM	04:00PM	W-LPI-235B - Making Optimal Decisions in Identifications and Exclusions - A Scientific Approach	In this workshop, participants will work through a variety of examples to improve their perceptual and decision making abilities in latent print examinations. As part of their jobs, examiners must construct their own internal thresholds in relation to their peers for what constitutes an identification or exclusion. However, as an examiner improves his or her abilities, these thresholds will need to be updated. The exercises in this workshop will help each participant develop a principled technique to discover where the thresholds need to be to match their current and improving abilities. The workshop will present examples of how to avoid erroneous exclusions, which may occur in casework more often than is realized, and erroneous identifications. Finally, we will discuss how fatigue can affect both the perceptual and decision making abilities, as well as how an examiner can recognize and mitigate fatigue.	Busey	Thomas	Vanderkolk	John
8/11/17	10:00AM	04:00PM	W-PHO-037 - Using High Dynamic Range and Panoramic Photography to Record Crime Scene Evidence	New technology and its application to forensic evidence is at the forefront of any investigation. High Dynamic Range and Panoramic Photography are two of those new techniques to better assist in the capture of crime scene evidence. This workshop will use the hands on approach, students need to bring a digital camera, tripod, cable release and laptop computer. HDR and Panoramic Software will be provided.	Brown McDonnell	King Owen	Watkins	Dawn
8/11/17	10:30AM	12:00PM	W-BPA-151 Part 2 A Courtroom Appropriate Demonstrative Aid For Bloodstain Pattern Examiners	NOTE THIS COURSE IS 8-5 THURSDAY 8/10 AND 10:30 TO 12 ON FRIDAY 8/11. This series of three workshops totaling 10 hours (4+4+2) will create a theoretically rich, experimentally based demonstrative aid suitable for presentation before the courtroom or classroom. This 10" x 14" wood board model depicts a spatter pattern and illustrates both the 2 - Dimensional Area of Convergence and the 3 - Dimensional Area of Origin. Experimentation will involve laboratory collected bovine blood. Workshop is designed for current BPA practitioners. 	Moore	Craig		
8/11/17	01:00PM	04:00PM	W-BPA-204 - Recognizing Voids and How to Use Them in Bloodstain Pattern Analysis	Investigative Question: Are you looking at a void or just an absence of blood? Voids are useful when documenting, interpreting and reconstructing an event where bloodshed has occurred. They can help identify and verify a secondary object that was at the crime scene. In addition, voids may be used to determine positions of subjects (victims, suspects, witnesses) relative to each other as well as the scene in general. This workshop will present characteristics of voids and case examples of their use in bloodstain pattern analysis. Displays will be presented for the student to examine so as to consider the investigative question.	Griffin	Tom		
8/11/17	01:00PM	04:00PM	W-CSI-083 - Processing and Automated Captioning of Crime Scene Photographs Workshop	The student must have basic windows and Photoshop skills. In this workshop each student will process a set of simulated crime scene photographs, create index prints, automatically caption individual photographs and output all the photographs and index prints as a multipage PDF file. MD5 hash values will be created that can be used to verify that the files have been correctly. Each student will be provided a DVD with the files used in this workshop.	Sanders	Robert		
8/11/17	01:00PM	04:00PM	W-GEN-060 - ISO/IEC 17020 for Police Science Units	This workshop narrows the focus of ISO/IEC 17020 to specific criteria for forensic police units. This includes crime scene investigations, friction ridge examinations, firearms, impression evidence, crash reconstruction, forensic anthropology and more. Important concepts such as document writing, traceability, measurement uncertainty and internal auditing will be discussed. The ISO/IEC 17020 standard and the technical requirements of ANAB will be discussed in detail. We will end with a discussion of the accreditation process and how to get started.	Grady	David		