

101ST INTERNATIONAL EDUCATIONAL CONFERENCE



International Association
for Identification

BRIDGE...TO A BRIGHT FUTURE

AUGUST 7 - 13, 2016 - CINCINNATI, OHIO



CONFERENCE BROCHURE

theiai.org/conference/2016/index.php



NEC's commitment to "Orchestrating a Brighter World" can be seen in our solutions that improve the way people live, work, and communicate. Leveraging decades of award winning NEC technology innovation, our solutions have a special focus on safety, security, and operational efficiency. It's this innovation that allows us to enable people to live brighter lives.

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\Orchestrating a brighter world

NEC



International Association for Identification

101ST INTERNATIONAL EDUCATIONAL CONFERENCE



CINCINNATI, OHIO

This August the International Association for Identification will hold its Educational Conference in Cincinnati, Ohio!!

The Conference theme “Bridge To A Bright Future” speaks to the future of the profession and our enthusiasm for the innovative advances yet to come.

The 5-day schedule is loaded with lecture presentations and workshops ... all topics that you’ve been asking for! Experts will concentrate on the technologies and trends that have the greatest impact for forensic identification professionals. It will be difficult to decide which sessions will need to command your attention, because the program is so varied. Presenters will provide hands-on workshops and lectures and you’ll benefit from the techniques and strategies that are being used by well-known agencies to solve high-profile cases.

In addition to the intense educational program, the latest and most up-to-date forensic products and services will be on view at the more than 125 booths in the exhibit area.

The 101st International Educational Conference will provide the perfect opportunity for you to develop a network of peers that will enhance your skills and challenge your investigative mind as well as provide a tremendous resource of professional and personal friendships.

CONFERENCE LOCATION

All Educational Sessions and the Conference Exhibit will be held at the Cincinnati Duke Energy Convention Center in the heart of downtown Cincinnati.

REGISTRATION HOURS DUKE ENERGY CONVENTION CENTER

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

QUESTIONS

General Conference:

Candy Murray

1-407-810-6112

8:30 am – 5:00 pm EST

conference@theiai.org

Registration:

Roy Reed

1-832-696-9448

8:30 am – 5:00 pm CST

register@theiai.org

Educational Program:

Jim Gettemy

1-850-591-2732

8:30 am – 5:00 pm EST

edplanner@theiai.org

Namebadges must be worn for all Educational Sessions and Social Events.

Register Now, Click Here

JOIN US FOR BREAKFAST AND OUR OPENING CEREMONY!



KEYNOTE SPEAKER

101st International Educational Conference, Cincinnati Ohio
MONDAY, AUGUST 8, 2016
Cincinnati Convention Center

DAYLE HINMAN

Host of “Body of Evidence: From the Case Files of
Dayle Hinman,” currently on Justice Network

NEC IS ALSO SPONSORING A FULL-BREAKFAST
What a great way to start your day and the Conference!

NEC



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This dynamic river region is full of endless things to do — cheer at a baseball game, cruise the Ohio River, enjoy a culinary experience at one of the award-winning restaurants or try a different taste at one of the new dining hot spots.

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REGISTRATION INFORMATION



FULL REGISTRATION

Registration will be \$375 (U.S.) for International Association for Identification members and \$475 for nonmembers. There would be an estimated additional \$250 for workshop fees (based on the sessions that you select). Individual workshops will range from \$20 to \$100 — dependent on the course content.

The full registration includes all conference materials, the Sunday President's Reception; Monday Breakfast, and Exhibit Grand-Opening Reception; Tuesday-night Poster Presentation/Photo Contest and Reception; Wednesday Dinner/Social; and Friday-night Installation and Closing Banquet. (Note: receptions are not full meals)

The full registration DOES NOT include workshops that require an additional fee, hotel accommodations, or travel.


DAILY REGISTRATION

Daily registration is \$130/day and the registrants will receive only the non-fee educational sessions for that day, and entrance to Exhibit. Workshops are additional.

STUDENT REGISTRATION

Student registration is \$195. To qualify as a Student Registrant, individuals must be full-time college students, with a major in forensic science-related field or law enforcement, taking 12 or more semester hours/credits or the equivalent in quarter hours/credits for undergraduate study and at least 9 semester hours/credits or the equivalent in quarter hours/credits for graduate study. Must provide a letter or transcript from their educational institution stating the number of credits currently being taken. The words "full-time student" will not suffice.

A Student Registrant receives all benefits of the Full Registration with the exception of the Wednesday night Social/Dinner and the Friday night Dinner (tickets may be purchased separately for those events). Students may go to any available class or workshop that interests them, however workshops may have additional fees attached.

Classes that would be of interest to students are indicated with the  as determined by the Student Advisory Committee. While these classes are suggestions, students should feel free to go to any available class or workshop that interests them. Please note that workshops may have additional fees attached. Also see the opportunity for Student Poster Presentations. ([Details page 48](#))

SOCIAL REGISTRATION

A Social Registration is for the Spouse/Guest of a regular registrant. The registration fee is \$225 and includes the Sunday President's Reception, Monday Breakfast and Opening Ceremony, Tuesday-night Poster Presentation/Photo Contest and Reception, Wednesday-night Dinner & Social, and Friday-night Installation Banquet. NOTE: Individuals must be 21 years of age in order to attend the Wednesday-night Dinner & Social.

FIRST-TIME ATTENDEES

First-time Attendees of the Conference will have an opportunity to meet the Conference Staff as well as their fellow first-time attendees on Sunday, August 7th at a Special Reception sponsored by Ron Smith & Associates. This is your chance to ask questions about what to expect during the week as well as build contacts and meet people that you'll be seeing during the week.

MEMBERSHIP MEETING

The IAI's Membership Meeting is open to all current IAI Members. There will be check-in with a continental breakfast prior to the meeting from 7:30 - 8:00 a.m. at the Convention Center and the Meeting will begin at 8:00 a.m. ALL members of the International IAI are encouraged to attend. This is the annual business meeting of the Association where officers for the next year are elected and other business is conducted.

ACCOMMODATIONS

Please visit the IAI website for reservation assistance at local hotels.

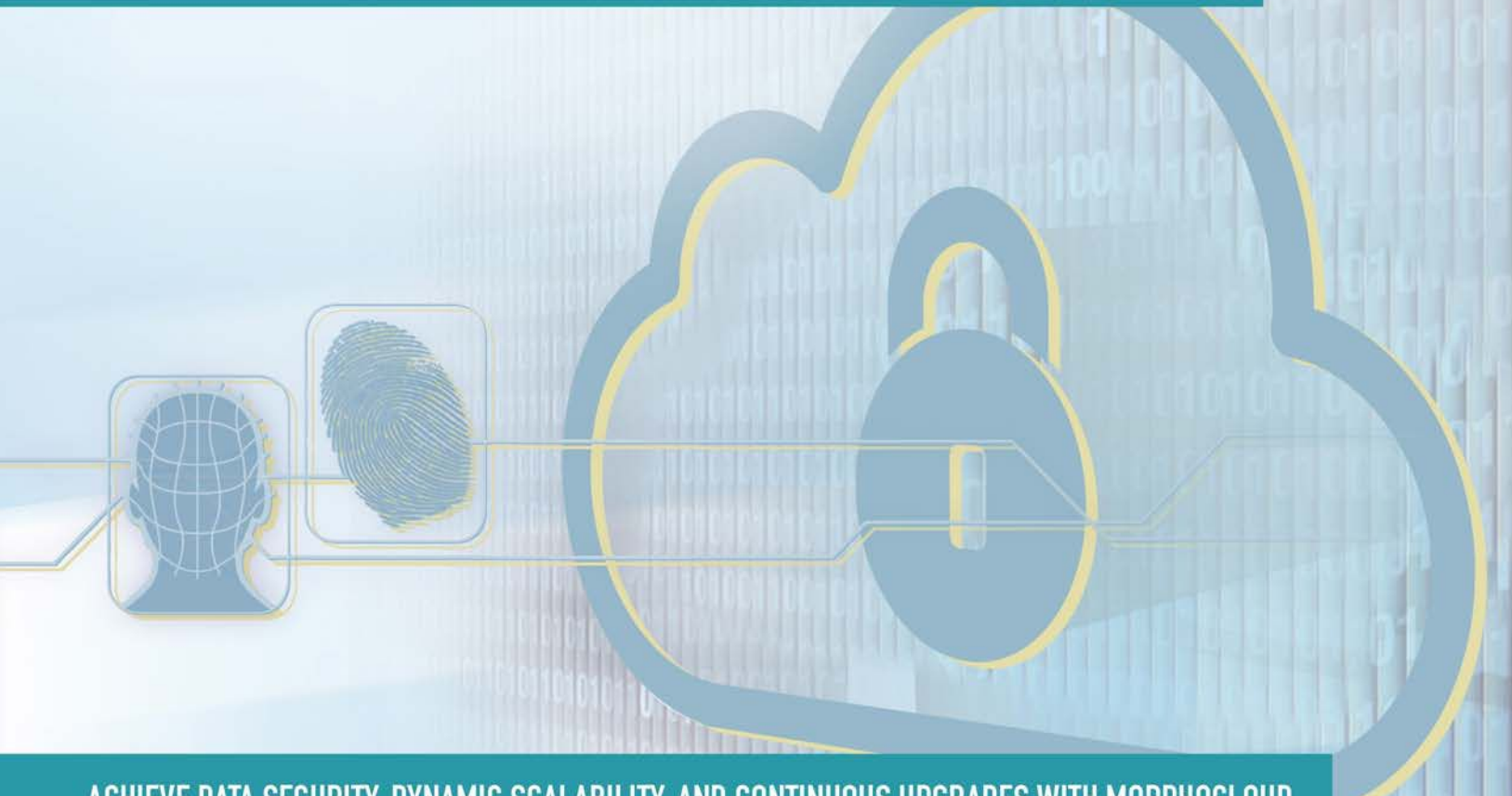
<http://www.theiai.org/conference/2016/hotel.php>

If rooms are still available, the cutoff date for hotel reservations at the Conference rate is **7/1/16**.

Namebadges must be worn for all Educational Sessions and Social Events.

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- › **Morpho Face Expert**
Conduct searches based on facial recognition
- › **Morpho Card Capture**
Transform hard copy fingerprint cards into digital records
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Manage workflows with a simple graphical interface
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Automate review of video to target persons, objects and movement; free investigators to review relevant sections

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Are You a Member of the Ohio Identification Officers Association of the IAI?

When you get to the conference, please check in at the OIOA Booth in the registration area.

OIOA EVENTS:

OIOA BOARD LUNCHEON

August 11

Noon - 1PM

Millennium Hotel Bronze Ballroom A

GENERAL MEMBERSHIP MEETING

August 11

4 - 6PM

Convention Center - Room #262

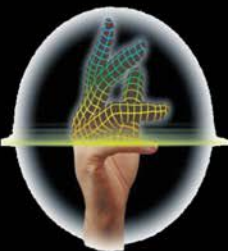
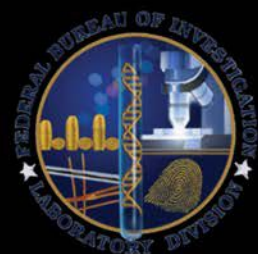


NGI is like fishing with dynamite!!! BOOM!

FBI Latent Services and NGI Latent Functionality

Q&A Opportunities at the IAI Cincinnati Conference August 7-13, 2016

Jeff Carlyle from the FBI Laboratory Division Latent Print Unit will be available all week at the IAI Conference to discuss why FBI Latent Services and NGI Latent Functionality is a MUST HAVE for ALL Law Enforcement Agencies. FBI NGI Latent Functionality has over 3 times the accuracy and reliability of Legacy IAFIS.



If you are not taking advantage of this resource or have specific questions regarding FBI Latent Services, please contact Jeff on call his cell at 202-497-6135 to set up an appointment.

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 POLICY:

The official IAI Photographer will be onsite to photograph events at the Conference. The photographs will be used in future IAI publications. If you object to having your image photographed, please inform the photographer prior to the photograph 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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CONFERENCE SOCIAL EVENTS

FIRST-TIME ATTENDEES

Sunday, August 7, 6:00 – 7:00 p.m.

First-time Attendees of the Conference will have an opportunity to meet the Conference Staff as well as fellow first-time attendees at a special reception. The reception offers a chance to ask questions about what to expect during the Conference as well as build contacts and meet people that you'll be seeing during the week.

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PRESIDENT'S WELCOMING RECEPTION

Sunday, August 7, 7:00 p.m.

IAI President Bridget Lewis welcomes Conference attendees to the 101st International Educational Conference. You'll meet Bridget and the IAI's Officers for this year's Conference. It is also an opportunity to see the friends that you've developed over the past conferences as well as meet new colleagues. This event is always a terrific kick-off to the week's activities and this year will be no exception.



EXHIBIT GRAND OPENING AND BEER & PRETZEL RECEPTION

Monday, August 8, 4:00 - 7:00 p.m.

The Grand Opening of the Exhibits offers you the first opportunity to see those companies offering the latest products and services for the forensic community.

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EXHIBITORS' RECEPTION

Tuesday, August 9, 4:00 – 7:00 p.m.

Tuesday night offers an action-packed reception in the exhibit hall. There will be poster presentations covering topics in the field of identification, crime scene search, as well as historical events relevant to identification. Additionally there will be student poster presentations and a full photo contest where forensic and creative entries will be on display.

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STUDENT POSTER SESSION

Students – this is an opportunity that you don't want to miss. You'll have the chance to win a cash scholarship for your presentation. This is the same format and will be held at the same time as the regular Poster Presentations. Topics in the field of identification, crime scene search, or items of historical importance to identification are appropriate. For details on registering to present and the possibility of winning a scholarship, [see page 48](#).

Sponsored by



PHOTO CONTEST SESSION

This annual event allows the opportunity for all to participate. There are categories for either "forensic" or "creative" photographic entries. Detailed information regarding the entry requirements and registering to present may be found on [see page 47](#).

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CLOSING BANQUET

Friday, August 12, 7:00 p.m.

The Closing Banquet and Installation of new officers is always a tremendous evening. It's an opportunity to recap the event-filled week, enjoy a wonderful meal, support the incoming officers that you elected at the day's business meeting, and sadly say goodbye to your colleagues until next year. Don't miss this wonderful finale to the 101st International Educational Conference.



CASINO NIGHT

MID-WEEK EVENT

HORSESHOE CASINO

WEDNESDAY, AUGUST 10TH
BUSES DEPART AT 6:00PM

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EXHIBITS

There will be a full Exhibit Hall in Cincinnati Duke Energy Center. You'll have an opportunity to view the latest products and services available in the forensic field. Mid-morning and afternoon breaks as well as a Grand Opening Monday with Beer and Pretzel Reception, Tuesday Reception during the Poster Presentations and Photo Contest will be in the Exhibit Hall.

Exhibit Hours

Monday, August 8

4:00 – 7:00 pm Grand Opening & Reception

Tuesday, August 9

9:00 a.m. – 7:00 p.m. Exhibits Open
4:00 – 7:00 p.m. Photo Contest, Poster Presentations & Reception

Wednesday, August 10

9:00 a.m. to 3:00 p.m. Exhibits Open

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AFIX Technologies, Inc.

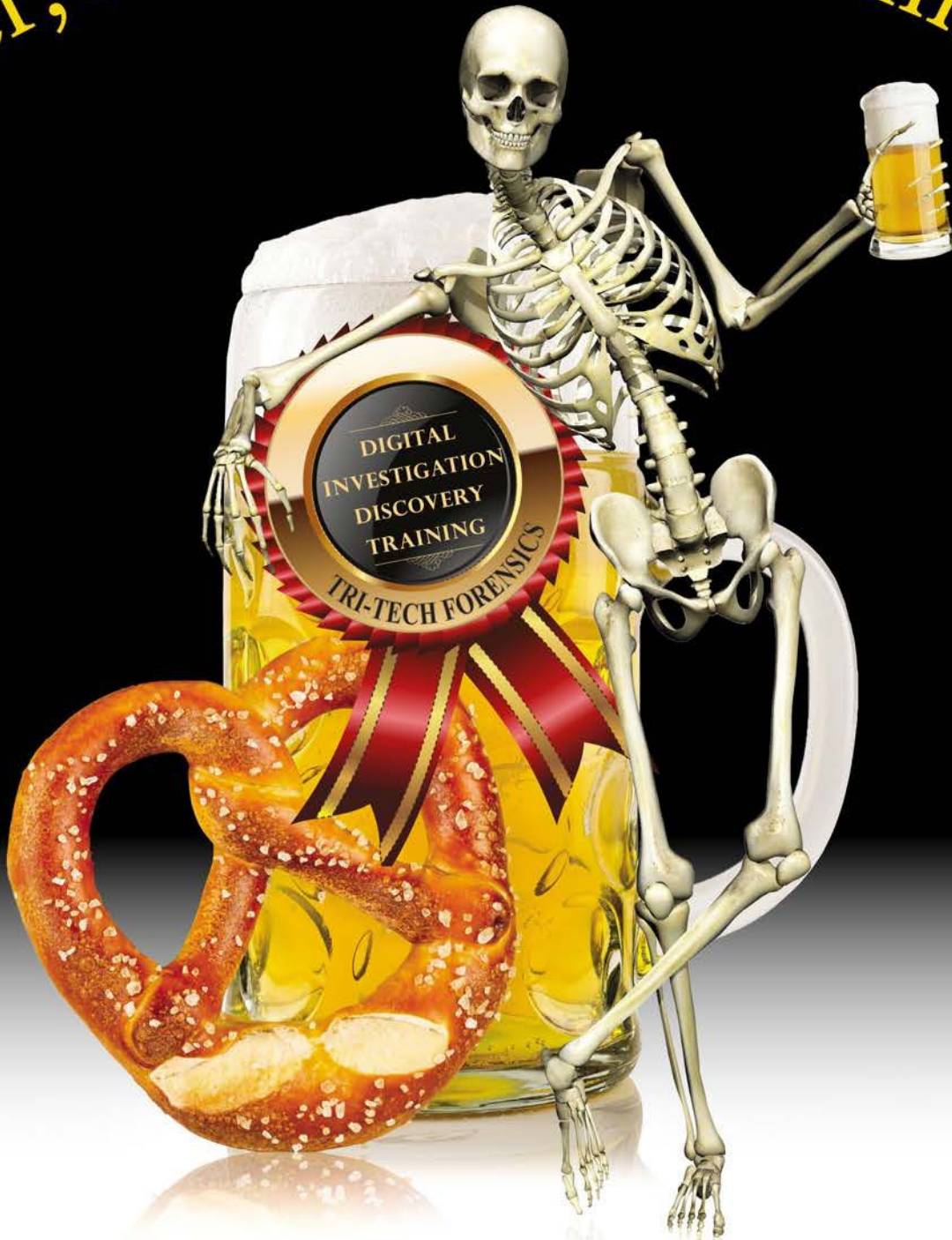
CONFERENCE NAME BADGES ARE REQUIRED FOR ADMITTANCE TO THE EXHIBIT HALL

EXHIBITORS

3M	DataWorks Plus	Nikon Inc.
A2LA - American Association for Laboratory Accreditation	Everspry Sci & Tech Co., Ltd.	Ocean Systems
Abbott Informatics	EVIDENT	Panoscan
Accurate-ID/iTouch Biometrics LLC	Faro Technologies	Raven Technology
Accutrans by Ultrasonics	Foray Technologies	Rofin Australia
AFIS and Biometrics Consulting, Inc.	Forensic Pieces	Ron Smith & Associates
AFIX Technologies, Inc.	Forensics Source	RTI International
Air Science USA, LLC	Foster & Freeman	Serological Research Institute
ANAB - ANSI/ASQ	FujiFilm North America Corporation	Sirchie
ANSI-ASQ National Accreditation Board	Ideal Innovations, Inc.	SOHO Network Solutions, Inc.
Arrowhead Forensics/Scientific, Inc.	JusticeTrax, Inc.	Sopra Steria
Attestor Forensics	Kjell Carlsson	Spectronics Corporation
Aware, Inc.	Labconco Corp	SPEX Forensics
Bevel Gardner	Lakota Software Solutions Inc.	Texas A&M Engineering Extension Service
Biometric Information Management	Laser Light Solutions	Tri-Tech Forensics
Biometrics 4All	Leica Geosystems	University of Tennessee Law Enforcement Innovation Center/ Ntl Forensic Academy
BVDA America, Inc.	Linear Systems	VeriPic
Collaborative Testing Services	Lynn Peavey Co.	Visionations
Copan Rock Technologies	Medtech Forensics, Inc.	
CRC Press	Mentalix, Inc.	
Crime Scene Technology (C.S.T.)	Mideo Systems Inc.	
Crime Sciences, Inc.	MorphoTrak	
CSIpix by iSYS Corp.	M-Vac Systems Inc.	
	Mystaire	
	NEC	

The IAI does not endorse any product or service of any advertiser, exhibitor, vendor, sponsor, speaker or provider.

Beer, Pretzels, & IAI Exhibits!



Join us at the **Beer 'n' Pretzels Reception** at the Exhibit Hall Grand Opening on Monday evening and lift a glass with your fellow attendees and exhibitors! Also, be sure to stop by Booth 211 to pick up your **free 2016 skeleton t-shirt** and see what other surprises we have planned!



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MEETINGS

Friday - August 5

<u>Time</u>	<u>Meeting</u>
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8:30am - 5:00pm	Board of Directors* Steve Johnson, Chair
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Saturday - August 6

<u>Time</u>	<u>Meeting</u>
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8:30am - 5:00pm	Tenprint Certification Board* Amy Gordon, Chair
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8:30am - 5:00pm	Latent Print Certification Board* Stephanie Howard, Chair
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8:30am - 5:00pm	Crime Scene Certification Board* Rebecca Daher, Chair
-----------------	--

8:30am - 5:00pm	Board of Directors* Steve Johnson, Chair
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Sunday - August 7

<u>Time</u>	<u>Meeting</u>
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8:30am - 4:30pm	Board of Directors* Steve Johnson, Chair
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8:30am - 5:00pm	Bloodstain Pattern Analysis Certification Board* Jeff Gurvis, Chair
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8:30am - 5:00pm	Tenprint Certification Board* Amy Gordon, Chair
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8:30am - 5:00pm	Latent Print Certification Board* Stephanie Howard, Chair
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8:30am - 5:00pm	Crime Scene Certification Board* Rebecca Daher, Chair
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6:00pm - 7:00pm	Orientation and Reception for 1st Time Attendees
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7:00pm - 11:00pm	President Reception President Bridget A. Lewis
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Monday - August 8

<u>Time</u>	<u>Meeting</u>
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7:00am - 8:00am	Science and Practice Subcommittee* (Committee Chairs only) Matt Johnson, Chair
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8:00am - 9:00am	Opening Ceremony Breakfast
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9:00am - 10:30am	Opening Ceremony 101st IAI Educational Training Conference President Bridget A. Lewis
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11:00am - Noon	Student Orientation Ken Zercie, Chair
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11:00am - 4:00pm	Board of Directors* Steve Johnson, Chair
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* Meeting closed to membership

MEETINGS

Monday - August 8 (continued)

<u>Time</u>	<u>Meeting</u>
Noon - 2:00pm	Tenprint Certification Board* <i>Amy Gordon, Chair</i>
Noon - 4:00pm	Latent Print Identification Subcommittee <i>Melissa Gische, Chair</i>
Noon - 4:00pm	Footwear / Tiretrack Examination Subcommittee <i>Michael Gorn, Chair</i>
Noon - 4:00pm	Latent Print Certification Board* <i>Stephanie Howard, Chair</i>
Noon - 4:00pm	Crime Scene Certification Board* <i>Rebecca Daher, Chair</i>
Noon - 4:00pm	Footwear Certification Board* <i>Jon Byrd, Chair</i>
2:00pm - 3:00pm	Tenprint Certification Board & Subcommittee <i>Amy Gordon and Ann Punter, Chairs</i>
3:00pm - 4:00pm	Tenprint Identification Subcommittee <i>Ann Punter, Chair</i>

Tuesday - August 9

<u>Time</u>	<u>Meeting</u>
7:00am - 11:00am	Crime Scene Certification Testing
8:00am - 11:00am	Nominating Committee <i>Deborah Leben, Chair</i>
8:00am - 11:00am	Professional Programs Quality Assurance Governing Board* <i>Robert Garrett, Chair</i>
8:15am - 3:45pm	OSAC Update
9:00am - 11:00am	Crime Scene Subcommittee Meeting <i>Koren Colbert, Chair</i>
10:00am - 11:00am	International Aspect Committee Meeting <i>Robert Ramotowski, Chair</i>
1:00pm - 5:00pm	Forensic Video Certification Testing
1:00pm - 5:00pm	Tenprint Certification Board* <i>Amy Gordon, Chair</i>
1:00pm - 5:00pm	Latent Print Certification Board* <i>Stephanie Howard, Chair</i>
1:00pm - 5:00pm	Footwear Certification Board* <i>Jon Byrd, Chair</i>
1:00pm - 5:00pm	Board of Directors* <i>Steve Johnson, Chair</i>

* Meeting closed to membership

Register Now, Click Here

MEETINGS

Tuesday - August 9 (continued)

Time	Meeting
4:00pm - 7:00pm	Poster Presentation and Photography Contest Karen Cooper, Chair

Wednesday - August 10

Time	Meeting
7:00am - 9:00am	Provisional Latent Print Development Subcommittee John Kilgore, Chair
7:00am - 11:00am	Forensic Photography Certification Testing
7:00am - 11:00am	Tenprint Certification Board* Amy Gordon, Chair
7:30am - 9:00am	Digital Evidence Subcommittee Jerry Hoover, Chair
8:00am - 11:00am	Biometric Information Systems Subcommittee* Scott Swan, Chair
8:30am - 11:00am	Board of Directors* Steve Johnson, Chair
9:00am - 11:00am	Crime Scene Certification Board Presentation & General Meeting Rebecca Daher, Chair
9:00am - 11:00am	Facial Identification Subcommittee* Ed German, Chair
9:00am - 11:00am	Footwear Certification Testing
1:00pm - 2:55pm	Latent Print Certification Board and General Meeting Stephanie Howard, Chair
1:00pm - 3:00pm	Facial Identification Subcommittee Open Meeting Ed German, Chair
1:00pm - 3:00pm	Forensic Podiatry Subcommittee Sarah Reel, Chair
1:00pm - 3:55pm	Biometric Information Systems Subcommittee & General Meeting Scott Swan, Chair
1:00pm - 5:00pm	Forensic Video Certification Board* Julie Carnes, Chair
1:00pm - 5:00pm	Footwear Certification Board* Jon Byrd, Chair
1:00pm - 5:00pm	Board of Directors* Steve Johnson, Chair

MEETINGS

Thursday - August 11th

<u>Time</u>	<u>Meeting</u>
7:00am - 9:00am	Editorial Review Board Breakfast* Alan McRoberts, Chair
8:00am - 10:00am	Probability Modeling: Training and Evaluation Committee Eric Ray, Chair
8:00am - 10:00am	General Forensics Subcommittee Greg Laskowski, Chair
8:00am - Noon	Crime Scene Certification Board* Rebecca Daher, Chair
8:00am - 5:00pm	Tenprint Certification Testing
8:00am - 5:00pm	Latent Print Certification Testing
8:30am - Noon	Board of Directors* Steve Johnson, Chair
10:00am - Noon	Forensic Photography/Electronic Imaging Subcommittee Brett Doretti, Chair
11:00am - 1:00pm	Ohio Division of the IAI - Luncheon
1:00pm - 3:00pm	Johnson -Whyte Memorial Foundation Fund Advisory Committee Steve Nash, Chair
1:00pm - 5:00pm	Bloodstain Pattern Analysis Certification Testing
1:00pm - 5:00pm	Forensic Photography/Imaging Certification Board* Ann Mallot, Chair
2:00pm - 3:00pm	IAI Division Secretaries' Meeting COO Glenn Calhoun, Chair
4:00pm - 6:00pm	Ohio Division of the IAI Business Meeting
5:00pm - 6:00pm	Bloodstain Pattern Analysis Certification Board and Subcommittee Jeff Gurvis & Cory Latham, Chairs
5:00pm - 7:00pm	Forensic Art Certification Board and Subcommittee* Stephen Mancusi, Certification Chair Suzanne Lowe Birdwell, Subcommittee Chair

Friday - August 12th

<u>Time</u>	<u>Meeting</u>
7:30am - 8:00am	Continental Breakfast
8:00am - 9:30am	IAI Membership Meeting President Bridget A. Lewis, Chair
10:00am - Noon	Student Recap Ken Zercie, Chair
7:00pm -11:00pm	Installation and Closing Banquet President Bridget A. Lewis

* Meeting closed to membership

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AFIX Tracker®

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this is why we have Tracker.*

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Lecture & Workshop Discipline Codes
The following codes indicate the specific forensic disciplines.

ART	Forensic Art	FTT	Footwear and Track Examination
BIS	Biometrics Imaging Systems	GFF	General Forensics
BPA	Bloodstain Pattern Analysis	LLS	Leadership Lecture Series
CSA	Crime Scene Analysis	LPD	Latent Print Development
DEE	Digital Evidence	LPI	Latent Print Identification
FII	Facial Identification	PEI	Forensic Photography & Electronic Imaging
FPP	Forensic Podiatry	TPI	Tenprint Identification

FPP-01



Noon-12:25pm

The Impact of Gait on Jury Decision Making

Dr. Ivan Birch

Professor, Consultant Expert Witness, Sheffield Teaching Hospitals NHS Foundation Trust, South Yorkshire, England

Tabitha Birch

MSc Forensic Psychology Student, University of Kent, Canterbury, England

Research has shown that emotions can be identified from gait. As CCTV footage becomes more commonly shown in court, juries will more often be exposed to the gait of perpetrators, and their innate ability to identify emotions from gait be inadvertently drawn upon in the making of decisions. This presentation will discuss the results of a study that explored the potential impact of the identification of emotion from gait on the jury decision making process.

LPD-01

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

James Snidauf, CLPE

Senior Fingerprint Specialist, Internal Revenue Service, Chicago, Illinois

This presentation will cover the robustness of three latent print processing techniques: Physical Developer (PD), Oil Red O (ORO), and Oil Blue A (OBA) on various porous substrates on fresh and aged sebaceous latent prints (charged and uncharged) in an attempt to show which technique works best.



FII-06

Noon-12:55pm

Face Recognition for Law Enforcement

Dr. Thirimachos Bourlai

Assistant Professor, West Virginia University, Morgantown, West Virginia

Within the last two decades, we have noticed improvement in the performance of forensic face recognition (FR) systems in controlled conditions characterized by suitable lighting and favorable acquisition distances. However, over the years the technology has steadily progressed by tackling increasingly more realistic conditions rather than adequately handling only well-controlled imagery. Most related research emphasizes maintenance of high recognition performance while coping with increased levels of image variability. Among the most insidious problems of visible-spectrum based FR algorithms are (1) the variation in level and nature of illumination, (2) the fact that as the level of illumination decreases, the signal to noise ratio rises quickly, and thus automatic processing and recognition become very difficult, (3) dealing with degraded face images acquired at night and at long standoff distances etc. In order to address these issues, recent research has moved into the use of ultraviolet (UV) and infrared (IR) imagery (e.g., intensified near infrared (NIR), Short Wave IR, Middle and Long Wave IR - thermal). This presentation will discuss the latest research efforts in face recognition across the imaging spectrum, the importance of forensics operators, as well as the future of this technology.

GFF-05

Noon-3:00pm

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

David M. Witzke

Vice President, Program Management, Foray Technologies

This presentation will focus on the latest trends in digital imaging, and how those techniques and technologies can help or hinder digital evidentiary image processing. During this presentation we will discuss how increasing your knowledge and understanding of available tools and techniques will remove the confusion, frustration and uncertainty and help you produce images that are true, “reliable,” and accurate representations.

GFF-23

Noon-4:00pm

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

Dayle Hinman

Criminal Profiler, Host of “Body of Evidence: From the Case Files of Dayle Hinman”, Justice Network

Criminal profiling has been the subject of countless movies, television programs and novels. The profilers are frequently portrayed as individuals with special psychic abilities. Often this ability is rooted in victimization or some serious physical or personality flaw. In reality, profilers are investigators who draw upon their own experience, specialized training in forensic and behavioral science and empirically developed information about the characteristics of known offenders. Essentially they are the historians of crime information.

Far from a magical event, profiling is an investigative technique that was developed and refined by the Federal Bureau of Investigation. It is a process of systematically reviewing and analyzing crime scene information. The major personality, behavioral and demographic characteristics of the offender are suggested based upon an analysis of the crimes. People are not profiled. Rather, the offender’s interactions with the victim(s) within the context of the crime scene(s) are examined in great detail. Criminal profiling does not end with a list of offender characteristics, but includes an investigative strategy to assist the investigating agency to focus on the most likely suspect.

Using specific case examples, the attendees will be given the opportunity to understand how these complicated cases were resolved. Participants will gain a greater understanding of criminal profiling and better appreciate the efficacy of collaborative working relationships between the various professional disciplines involved in criminal investigation.

Register Now, Click Here

FPP-04



12:30pm-12:55pm

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

Dr. Sarah Reel

Forensic Podiatrist and Consultant Expert Witness, Sheffield Teaching Hospitals Foundation Trust, United Kingdom

Dynamic bare footprints regularly show inner dark and outer ghosting features around the heel and toe apices. While ghosting features are analyzed in forensic practice, the inner dark areas are not. The aim of this project led by Professor Wesley Vernon OBE was to determine the cause of both these features in dynamic prints. The presentation will describe what happens in real time when a foot makes a mark with the ground, determined by the results of ground reaction force data collected by a Kistler force plate and simultaneous video recording. Results from the research could facilitate the cautious use of the inner dark areas as additional points for forensic comparison.

FPP-03

1:00pm-1:25pm

The Use of Radiographic Images of the Foot in Forensic Evaluation

Dr. David Agoada

Self-employed Podiatrist, Retired Senior Podiatrist at Harvard Vanguard Medical Associates, Boston Massachusetts

Plain radiographs of the foot are a common form of examination when medical evaluation is indicated, providing useful information on bone morphology and angular relationships. Since they are commonly performed, their availability makes them potentially useful in assisting in the identification of an unknown individual from pedal osseous remains. The objective of this presentation is to demonstrate how radiographs can be used in the forensic evaluation of pedal remains of unknown individuals.

FII-07

1:00pm-1:30pm

Multi-biometric Identification Supporting Face and Forensic Face Comparison

Kaustubh Deshpande

Sr. Product Manager, Safran Morpho

With the go-live of the FBI NGI IV, a lot of state and local agencies have supplemented their AFIS implementations with Face Investigations to further their crime solving capabilities. In this presentation we will discuss the benefits of a multimodal AFIS through use cases. We will then look at the success stories from some of the agencies that have implemented such systems in the past couple of years.



LPI-12



1:00pm-2:00pm

Understanding Latent Fingerprint Exclusion Decisions

Dr. JoAnn Buscaglia

Research Chemist, Federal Bureau of Investigations, Quantico, Virginia

R. Austin Hicklin

Fellow at Noblis, Falls Church, Virginia

Maria Antonia Roberts

Research Program Manager, Federal Bureau of Investigations, Quantico, Virginia

Bradford T. Ulery

Sr. Principal at Noblis, Falls Church, Virginia

This research study was conducted to better understand the circumstances under which examiners make correct and erroneous exclusions in order to improve the examination process, and to provide information regarding the accuracy, reliability, and implications of exclusion decisions. The study was conducted by the FBI Laboratory and Noblis, based on new analyses of data collected in our Black Box and White Box Latent Print Examiner studies.

FPP-06

1:30pm-2:00pm

Development and Status of Forensic Podiatry in India

Kewal Krishan

Anthropology Department, Panjab University, India

The objective of this presentation is to discuss about the development and status of forensic podiatry in India. The science of foot and footprints in India is underprivileged. This science is considered as a rudimentary science in India. Although a lot of research work may be conducted in India regarding forensic podiatry due to extensive physical and cultural diversity of its people, however, not much work has been reported from India. Many of the forensic scientists may not be aware about this discipline. There is a need to spread awareness about this discipline so that the studies may be conducted and forensic casework pertaining to podiatry may be solved effectively.

FII-03



2:00pm-2:55pm

Introduction to FBI's Face Comparison and Identification Training

Tina L. Daugherty

Training Instructor, Federal Bureau of Investigation Criminal Justice Information Systems, Clarksburg, West Virginia

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.

FPP-07

2:30pm-2:55pm

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

Dr. Michael J. Curran

Associate Professor, The University of Northampton, England

Method A sample of 23 final year podiatry students were used in the investigation. Each student jumped on an individual basis from the same measured height onto an inkless mat and reactive paper. Gunn's method was used to measure the difference in length and width between the two prints. Results There was a highly significant increase in length and width between a bare foot print taken standing and then measured after jumping on both left and right feet. Conclusion: A forensic footprint investigator would need to consider if a bare footprint had been left at a crime scene after jumping from a height.

LPI-19

2:30pm-3:25pm

The Relation between Ridge Detail and Fingerprint Decisions

Dr. Thomas Busey

Professor, Indiana University, Bloomington

John Vanderkolk

Laboratory Manager, Indiana State Police, Ft. Wayne

Fingerprint comparisons involve the gradual accumulation of information, which ultimately might exceed a threshold and result in a decision such as Identification or Exclusion. How do different features or regions contribute to this decision and what types of perceptual expertise facilitates this information acquisition? Finally, do the thresholds used by examiners correspond to those we would want for our society? We address these questions using empirical tests collected from experts and laypersons.

FPP-02

3:00pm - 3:20pm

HMA vs Gordon Veitch, A Multidisciplinary Case Study

Dr. Ivan Birch

Professor, Consultant Expert Witness, Sheffield Teaching Hospitals NHS Foundation Trust, South Yorkshire, England

Selina Reidy

Identification Officer (Footwear), West Yorkshire Police, and Forensic Podiatrist, Sheffield Teaching Hospitals NHS Foundation Trust, South Yorkshire, England

In October 2015 Gordon Veitch was found guilty at Edinburgh High Court of murder. Key to the investigation and the subsequent trial was the significance of two sets of bloody footprints, both leading away from the scene of crime. The success of the investigation was predicated on effective multi-professional team work. The presentation will outline the case, and discuss both the strengths and weaknesses of having such a diverse team working on the same case.



FPP-02

3:00pm-3:25pm

HMA vs Gordon Veitch, A Multidisciplinary Case Study

Dr. Ivan Birch

Professor, Consultant Expert Witness, Sheffield Teaching Hospitals NHS Foundation Trust, South Yorkshire, England

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FII-05

3:00pm-4:00pm

Overview of Sample Facial Identification Training

Lora Sims, CTPE

Senior Biometric Examiner, Ideal Innovations, Inc., Clarksburg, West Virginia

Many examiners are trained on how to use their Facial Recognition system but are not trained on how to conduct an examination. Examination training is imperative to generating the correct investigative leads. This presentation will give an overview of one approach to a Facial Identification Training course and how it incorporates the comparison methodologies and techniques as recommended by the Organization of Scientific Area Committees (OSAC) and Facial Identification Scientific Working Group (FISWG).

LPD-05



3:30pm-4:00pm

Finer Friction Ridges Aren't Always Female

Shelly Brazelle, CLPE

Lead Fingerprint Specialist, US Secret Service, Washington, DC

The old adage that “finer” friction ridges (higher ridge density) are female and “coarser” friction ridges (lower ridge density) are male isn't always true. Epidermal ridge density has been used as a tool for gender determination in fingerprints. Studies have published that high ridge densities are female, while low ridge densities are male. This lecture discusses new data challenging these studies, the data presented will demonstrate a correlation between epidermal ridge density and stature of an individual. It will have you thinking about “finer” ridges differently.

FPP-05

3:30pm-4:00pm

The Reliability and Validity of Dynamic Bare Footprint Data Captured Using a Walkway Developed by Everspry of Dalian, China - a pilot study

Dr. Sarah Reel

Forensic Podiatrist and Consultant Expert Witness, Sheffield Teaching Hospitals Foundation Trust, United Kingdom

Chinese company Everspry are no strangers to the annual IAI Educational Conferences. One of their products, EverOS, a stand-on scanner for use in custody suites, already offers a pragmatic solution for the digital capture of outsole patterns. Also under development is a walkway which captures outsole patterns whilst the subject is walking. There is potential for the scanner to capture not just shoeprints, but also footprints. This lecture will discuss the results from a pilot study to determine the extent of reliability and concurrent validity of the walkway scanner when capturing bare footprint data.

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GFF

11:45am-1:45pm

W94 \$25 Basic Training

The Proper Use of Reflected Ultraviolet Imaging Systems - RUVIS

Kenneth Martin, CLPE, CBPA, CFWE, CCSI

Detective Lieutenant (ret), Massachusetts State Police, IAI Past President, Serves on IAI Board of Directors

George Setola

Forensic Division Manager, SPEX Forensics

This workshop will discuss and illustrate the use of current RUVIS technologies in the detection of evidence at the crime scene and in the laboratory. Applications for RUVIS technology will be clearly defined and this technique will be demonstrated and practiced by the attendees. RUVIS will be compared and contrasted to current forensic (alternate) light source technologies and techniques. The goal is to achieve a basic understanding of, and begin to attain proficiency in the use of this technology and how to improve the possible results of that use. Those attendees who have RUVIS devices are invited to bring them. **This workshop will not be offered again.**

FTT

Noon-4:00pm

W5 \$50 Intermediate Training

Introduction to the Recovery of Footwear Evidence

William J. Bodziak, CFWE

Forensic Examiner, Bodziak Forensics, Palm Coast, Florida

This four-hour workshop covers the proper practice of photographing, casting and lifting footwear evidence. It includes videos and demonstrations of a variety of lifting and casting methods, many with recently introduced materials. This workshop will serve as a great one-stop presentation of the best practices for impression evidence recovery for both novice and intermediate level crime scene technicians as well as lab examiners or supervisors who need a good review of footwear impression recovery. Time permitting, presentation of blood enhancement methods will also be covered. **This workshop will not be offered again.**

PEI

Noon-4:00pm

W9 \$40 Basic Training

Basic Digital Camera Operation for Police Photography

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

Basic Camera and Flash Photography Skills. Last year it was observed that many attendees did not know basic photographic skills. The workshop was designed to solve this problem. The workshop will begin with a short 15 minute lecture on digital camera settings, flash operation and the use of a tripod. Following the lecture each student will be assisted as needed. Once all the students know how to use their equipment they will photograph several exercises which will include: depth of field (close-up, intermediate range and distance), simulated latent prints, simulated footwear impressions, overall photograph of a weapon, black box with one weapon outside of the box and one weapon inside of the box (available light, flash on camera and off camera flash) and if available overall photographs of a small room. Students can work in pairs as long as each person photographs each assignment. When each student is finished an instructor will review their photographs in camera. Each student must bring their DSLR, a tripod, electronic flash, cable release and flash extension cable. A limited number of tripods, flashes, cable releases and flash extension cables will be available for loan during the workshop. **This workshop will not be offered again.**

LPI

Noon-4:00pm

W19 \$60 Basic Training

Photoshop for Fingerprints: Level 1

Mark Zabinski, CLPE, CSCSA

Criminalist II, Rhode Island State Crime Lab, Kingston

Scott Osborn

Senior Scientific Officer, Forensic and Data Centres, Australian Federal Police, Australia

This hands-on workshop has been designed to go step-by-step through the processes of imaging and enhancement techniques using Adobe Photoshop and along the way provide hints, tips and tricks to using Photoshop more effectively. The focus will be on giving those who want to use Photoshop but not sure how, the basic knowledge to navigate the Photoshop workspace and use a selection of available tools. Over the course of the workshop you will gain an understanding of;

- Working with Bits
- Navigating desktop tools
- Using
 - o Preferences i.e. Activating History Log
 - o Rulers
 - o Histograms
 - o Layers
 - o Raw conversion
 - o Basic Image enhancements such as Levels, B&W Adjustment and Inverting
 - o Image resizing

It is desirable that participants have a basic knowledge in regards to navigating their way around a windows operating environment and Adobe Photoshop, but not essential. **This workshop will not be offered again.**

LPI

Noon-4:00pm

W34 \$40 Intermediate Training

Latent Print Testimony: How to be Transparent without Feeling Naked

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

For over a century, latent print testimony has remained virtually unchanged. Some of the standard testimony didn't make much sense. Some was based more on belief than science. But these assertions were rarely challenged. Then, the 2009 NAS report changed the courtroom landscape. New types of challenges appeared. Latent print examiners were instructed to avoid certain phrases, but weren't told what to say instead. More than five years have passed since the NAS report. It is time for latent print examiners to find a way to move forward.

This workshop will walk through some of the tough concepts that come up in court. We will discuss error rate, discriminability, certainty, variability, bias, uniqueness, and the identification decision in the context of the relevant population as well as reviewing recent research that can support our testimony. These topics will be covered in an open, transparent, and non-defensive way that shows latent print examiners one way to present their findings without feeling exposed. There will be interactive discussions and examples of ways to answer the tough questions in the "new way". **This workshop is also offered as W35 on Thursday from 8:00am-Noon.**

LPI

Noon-4:00pm

W36 \$40 Intermediate Training

Comparison of Plantar Friction Ridge Impressions

Jon T. Stimac, CLPE

Forensic Instructor, Ron Smith & Associates, LLC

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.

This workshop will not be offered again.

PEI

Noon-4:00pm

W45 \$35 Intermediate Training

Use of Filters and Basic Photography Skills as Applied to Fingerprint Photography

Larry Dow and Esther Neate

Applications Engineers, Foster + Freeman, USA

After over nine years of teaching digital photography as it applies to fingerprints in the lab, the presenter has many tips to share. In a word it is back to basics. The proper use of filters and various lighting techniques that can add efficiency to your work are discussed. Without proper lighting and the correct choice of color filters, no amount of enhancement can ever yield a quality product. Presented in an easy to follow manner and followed up with a free CD of the contents, no matter what your skill level, this presentation can improve your job performance.

This workshop is also offered as W46 on Tuesday from 7:00am-11:00am.

LPD

Noon-4:00pm

W47 \$50 Advanced Training

Examination of Bodies for Fingerprints – Proven Methods, Tried and True

Brian Dalrymple, CLPE

Forensic Consultant, Brian Dalrymple and Associates, Coldwater, Ontario, Canada

Human skin is arguably the most challenging and unpredictable fingerprint substrate, and the most rewarding when it produces results. A four hour workshop in which the student will learn the history of body examination, the critical process of triage, and the documented cases in which murderers have been identified by their fingerprints on the skin of their victims. Effective SOPs and implementation procedures will be discussed. The student will practice hands-on application of the techniques that have yielded positive results.

This workshop is also offered as W48 on Tuesday from 7:00am-11:00am.

BPA

Noon-4:00pm

W97 \$40 Basic Training

Bloodstain Pattern Analysis: Theory, Applications and Functions in Criminal Investigations

Grant D. Graham, CSCSA, CBPA

Forensic Manager, Fayetteville Police Department, North Carolina

Few things hold so important a place as, or involve investigations of a greater nicety, than determining the precise nature of various bloodspots or stains found on fabrics, instruments, ect.” Charles M. Tidy wrote this quote in his book entitled Legal Medicine, published in 1882. In keeping with Tidy’s thoughts on “bloodspots”, this workshop discusses the uses, benefits and application of bloodstain pattern analysis. Students will be instructed on terminology, recognizable characteristics of bloodstain patterns, and how to apply this information to on scene casework. The workshop will culminate with a practical application pattern recognition exercise.

This workshop will not be offered again.

BPA

Noon-4:00pm

W103 \$30 Basic Training

Photographing the Blood Event Scene

David J. Doglietto, CSCSA

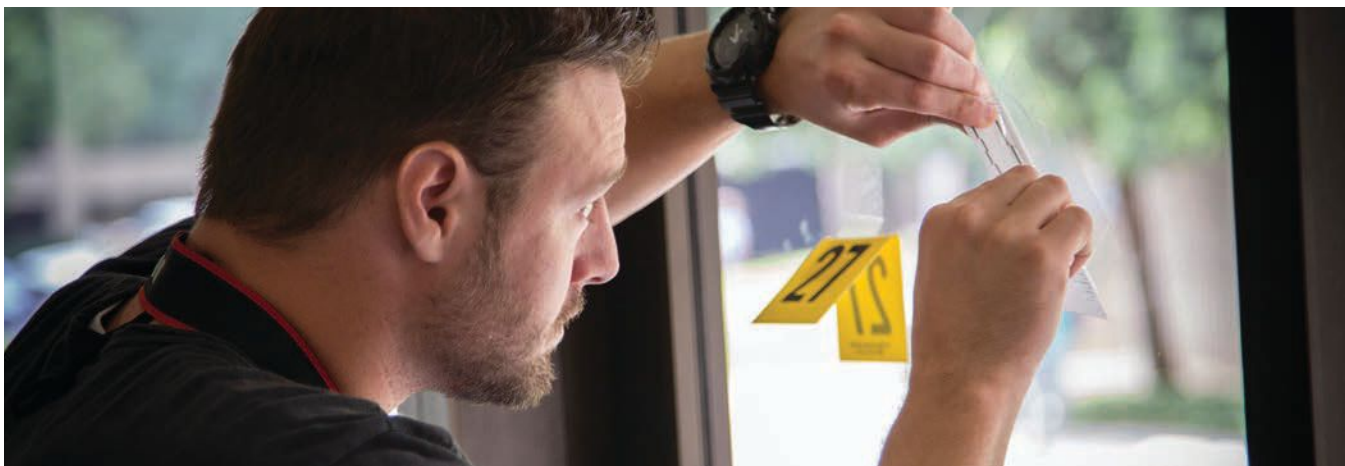
Investigator/Forensic Specialist, Greenfield, California

Ted McDonald

Senior Forensic Sciences Instructor, Federal Law Enforcement Training Centers, Brunswick, Georgia

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 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. This workshop is designed for the intermediate student who has a working knowledge of their camera and the ability to change camera settings. Don’t forget to bring your cameras, tripods and flashes!

This workshop will not be offered again.



LPD

2:00pm-4:00pm

W50 \$30 Basic Training

Taking the Latent Fingerprint Lab into the Field ... Pretty Much Anything Goes!

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

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. Development techniques include:

- Cyanoacrylate Glue Fuming (MacGyver portable chambers and fuming wands)
- Dye Staining and Forensic Light Sources
- Iodine Fuming – Silver Plate
- Compressed Air applications
- Amino Acid development

This workshop will not be offered again.

GFF

2:00pm-4:00pm

W95 \$25 Basic Training

Evidence Detection across the Spectrum: Using Forensics Light Sources from 254nm to over 1m (>1000nm)

Jon Goldey and Walter Hiller

Forensic Instruments Specialists, SPEX Forensics

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. **This workshop will not be offered again.**



LPD

6:00pm-8:00pm

W7 \$25 Intermediate Training

Tips and Tricks for Lifting Latent Prints

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

Have you ever tried to lift a latent fingerprint in the blowing wind? Have you ever had so many lifts it took hours to tape and lift? Have you ever had your tape rip? How about those creases? Have you ever not had your knife, fingernails, scalpel or teeth available to cut your tape? How would you like to be able to pull and tear your tape in a single motion? Tricks & Tips for Lifting Latent Prints will teach you the Famous Texas Tear and other known Tears. The student will learn some various techniques for application & lifting of latent prints to help you recover those difficult & illusive latent fingerprints. **This workshop will not be offered again.**

LPD

6:00pm-8:00pm

W51 \$25 Basic Training

Processing Tips for Marijuana Grow Labs

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

Latent fingerprint examination of marijuana grow labs can be challenging. The highly reflective wall covering surfaces and heat generating light bulbs are particularly difficult. This workshop will examine techniques for developing and photographing latent prints on these surfaces. Traditional and novel techniques will be discussed.

This workshop will not be offered again.

PEI

6:00pm-10:00pm

W10 \$30 Basic Training

Basic Photoshop and Windows Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

Basic Photoshop and Windows Skills. Last year it was observed that many attendees did not know basic Photoshop and Windows skills. This workshop was designed to provide students with the basic skills needed for basic through advanced Photoshop workshops. The introduction to Windows will cover creating a new folder (directory), copying files, renaming files and common short cut keys. The introduction to Photoshop will cover navigating to the correct folder to open a file, saving a file in a different file format, resizing vs. resampling an image, duplicating a layer, creating a smart object layer, applying a filter to a smart object layer, creating and running a simple action, adding an adjustment layer, using bridge to batch rename files, using contact sheet to create index prints, enlarging the canvas, drawing lines, adding text and flattening an image. **This workshop will not be offered again.**

TPI

6:00pm-10:00pm

W57 \$25 Advanced Training

Advanced Tenprint Comparison Techniques

Kenneth E. Blue, CTPE

Information Manager of the Law Enforcement Support Unit, Tennessee Bureau of Investigations, Nashville

Kevin J. Burke, CTPE, CLPE, CSCSA

Friction Ridge Examiner, Andover Police Department (retired), Massachusetts

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.

This workshop will not be offered again.

LPI

6:00pm-10:00pm

W68 \$30 Basic Training

Universal Latent Workstation – The Basics

Kimberly Bolyard, CTPE

Training Instructor, Federal Bureau of Investigation/Criminal Justice Information Services Division, Clarksburg, West Virginia

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 or palm images. Some of the information covered in this session includes: managing transactions; encoding minutiae points; adjusting file penetration; designating repositories for searches; and conducting comparisons 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 Next Generation Identification (NGI).

This workshop will not be offered again.



CSA

6:00pm-10:00pm

W79 \$35 Basic Training

Trajectory of Vehicles: Rods, Strings and Lasers

Jan Johnson, CSCSA

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

Andrew Taravella, CSCSA, CFPH

Senior Police Officer, Houston Forensic Science Center, Texas

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. Workshop attendees will work to recover all the forensic pieces, formulate a reasonable shooting reconstruction solution, and solve the puzzle using a variety of trajectory analysis related equipment, such as lasers coupled with special photographic techniques, along with other apparatuses. This workshop is geared toward crime scene technicians, investigators, detectives, medical examiners and/or ME investigators, laboratory analysts, and other forensic practitioners associated with crime scene investigations. Students participating in this workshop should bring a camera and tripod if you wish to document the exercises. **This workshop is also offered as W80 on Wednesday from 8:00am-11:00am (a light source will not be utilized during this workshop).**



Register Now, [Click Here](#)

GFF-12

7:00am-7:25am

Spinning of Firing Pin of Firearms

Aurangzaib Ahmad

Junior Forensic Scientist, Firearms Examiner, Punjab Forensic Science Agency, Lahore, Pakistan

This lecture will be consisting of methods, techniques and importance of firing pin spin of certain firearms, which may be helpful for firearm examiners for examination.

LPI-25

7:00am-7:55am

Mobile Latent Print Identification

Mike French, CLPE

Biometric Expert-Friction Ridge, MorphoTrak

Advances in AFIS image processing and matching have the potential to greatly increase efficiency in latent print examination, and provide match results to investigators more rapidly. Combining this technology with mobile capture and transmission is the next logical step in the evolution of latent print work. New uses of probable match results, as well as enhancement of traditional latent examination workflows will be explored in this lecture.

FII-02

7:00am-8:25am

The Universal Face Workstation (UFW) – an Overview

Marian Price

Training instructor, Federal Bureau of Investigation, Criminal Justice Information Services Division, Clarksburg, West Virginia

This presentation is designed to provide an overview of the Universal Face Workstation (UFW) software. The UFW software is an investigative tool supported and provided by the FBI's Criminal Justice Information Services (CJIS) Division. It is used to conduct image retrieval and face recognition searches of the Interstate Photo System (IPS). This presentation will provide a high-level overview of the UFW software and its user interface.

CSA-01



7:00am-9:00am

The Perils of Addiction and Overlooking Crime Scene Evidence

Joe E. Keil

Deputy Sheriff, Manitowoc County Sheriff Department, Wisconsin

Participants will be given an understanding of addiction by a visual demonstration in which students are involved in examining the internal components of the brain and drug use. Upon completion of this portion of the class students will be able to comprehend the signs and symptoms of drug use and be able to identify the major systems of the human body and how each system reacts to drug addiction. Participants will also examine a variety of drug related clothing and clandestine paraphernalia commonly used in the drug world and finally given an understanding of why there is a correlation between sex, porn, substance abuse and addiction. Knowledge is power and understanding what to look for at crime scenes is paramount since most crimes involve substance abuse.

DEE-01

7:30am-7:55am

The Forensic Video Certification Exam: “You Can Do It!”

Kimberly A. Meline, CVE

Photographic Technologist, Federal Bureau of Investigation, Quantico, Virginia

This presentation will include a description of the Forensic Video Examiner Certification, and tips for those interested in completing the examination. It will include a short time for questions and answers related to the examination.

PEI-05

8:00am-9:00am

The Digital Automotive Image System

Walter E. Bruehs

Supervisory Forensic Image Examiner, Federal Bureau of Investigation, Quantico, Virginia

Christopher W. Iber

Forensic Image Examiner, Federal Bureau of Investigation, Quantico, Virginia

This presentation is designed to provide an overview and demonstration of the FBI’s current Digital Automotive Image System (DAIS) and of future enhancements to this software platform. The commission of crimes and terrorist acts frequently involve the use of some kind of motor vehicle. Having quick access to images of known vehicles through a searchable database can improve the chances of eye witness and investigator’s identification of the make and model of the suspect’s vehicle. The DAIS software is an investigative tool supported and provided by the FBI’s Forensic Audio, Video and Image Analysis Unit. The software is distributed at no cost to Federal, State and Local law enforcement in North America. Additionally the DAIS is on the cusp of integrating a vehicle search tool. This search tool will provide the capability for post-event forensic analysis of video and digital image depictions with an enhanced feature to automatically extract and classify vehicles from video streams in real time. The system shall also have the capability to identify the make and model of the vehicle in a still image or a video clip to narrow the field of candidates that must be searched in an investigation.

LPD-04

8:00am-9:00am

Validation of Lumicyano and PolyCyano UV

Theresa Wood

Forensic Scientist, Washington State Patrol Crime Laboratory, Cheney, Washington

Processing with a fluorescent cyanoacrylate could take place of processing with the 2-step process of cyanoacrylate followed by a dye stain. This presentation examines the Washington State Patrol’s validation of Lumicyano and PolyCyano UV. The presentation discusses the validation procedures, the pros and cons of both products, and will give attendees an insight into these new products and how they might be used in casework.



GFF-21

8:15am-3:45pm

Organization of Scientific Area Committee (OSAC) Update

Moderator: Dr. Richard Vorder Bruegge – OSAC Forensic Science Standards Board Outreach Chair

Senior Photo Technologist, Federal Bureau of Investigation, Quantico, Virginia

OSAC is a collaborative body of more than 500 forensic science practitioners and other experts who represent local, state, and federal agencies, academia, and industry. It 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. The purpose of this day of presentations is to bring IAI Conference Attendees an update on the latest progress of the OSAC.

- 0815 – 0845 OSAC/FSSB Overview
- 0845 – 0915 Digital/Multimedia SAC Update
- 0915 – 0945 Physics/ Patterned Evidence SAC Update
- 1000 – 1030 Friction Ridge Subcommittee Update
- 1030 – 1100 Facial Identification Subcommittee Update
- 1300 – 1330 Footwear and Tire Impression Subcommittee Update
- 1330 – 1400 Blood Stain Pattern Analysis Subcommittee Update
- 1400 – 1430 Video/Imaging Technology & Analysis Subcommittee Update
- 1445 – 1515 Firearms & Toolmarks Subcommittee Update
- 1515 – 1545 Forensic Document Examination Subcommittee Update

FII-04

8:30am-9:00am

Review of Facial Recognition in Three Court Cases

Dr. Behnam Bavarian

Principal Consultant, AFIS and Biometrics Consulting Inc., Newport Beach, California

In this talk we will review three criminal and legal cases involving facial recognition and comparison. Each case will highlight a different aspect of the use of the person in the question picture from the target surveillance camera or paper document source to a pristine picture captured in a controlled environment. Facial recognition is being used increasingly by the law enforcement agencies. These examples will provide excellent lessons-learned for advancing our knowledge in this field.

FII-01

9:30am-10:25am

Integrating Facial Forensic Standards Directly into Training and Operational Environments

Neal Gieselman

Principal Biometric Solution Architect, Aware Inc.

Facial biometrics are moving into the mainstream where its use will approach that of finger biometrics. As this is evolving the focus will change from deployment to examiner training and eventual admissibility of facial based conclusions into legal proceedings. The capability exists to integrate the current and emerging standards of facial identification directly into operational environments so that agencies can realize tighter integration of facial standards in the training and operational context. There has to be a change of focus where the user based experience of the facial examiners is assumed to be equal in importance to the published accuracy of the facial biometric technology used in the operational solution.

LPI-22

9:30am-10:25am

Beyond Approach 1 and Approach 2: Latent Print Decisions, Suitability, and Sufficiency

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety, Phoenix, Arizona

In 2011, SWGFAST released significant updates regarding friction ridge examination in their “Standards for Examining Friction Ridge Impressions and Resulting Conclusions” document. Among the updates was a recognition of two main Approaches in determining suitability during the Analysis stage of ACE-V. Many agencies determine suitability for identification (Approach 1), while many others determine suitability for comparison (Approach 2). Strict adherence to either Approach as they are written may cause complications for examiners because determining suitability is not always so straight-forward. Determining suitability includes questions on both identification and exclusion, how to properly reach inconclusive decisions, and how to decrease the risk of error. This lecture describes how to move beyond binary approaches to suitability towards a system that can adjust to the specific needs of the agency.

CSA-02



9:30am-11:00am

Inside a Serial Kidnapper’s House - Ariel Castro

Christopher Garnett

Special Agent, Federal Bureau of Investigation, Cleveland, Ohio

Michael Wisniewski

Intelligence Analyst, Federal Bureau of Investigation, Cleveland, Ohio

Between 2002 and 2004, Ariel Castro systematically kidnapped three young women, Michelle Knight, Amanda Berry and Gina DeJesus. They were imprisoned in his Cleveland, Ohio area home until May 6, 2013, when Berry escaped and contacted the police. This lecture focuses on the FBI’s Evidence Response Team (ERT) work during the days that immediately followed these young women’s miraculous escape and recovery. The 10 year survival story, belongs to those women who lived it.

PEI-03

9:30am-11:00am

Crime Scene Photography: Back to Basics, or What Does That Do?

Scott Campbell, CSCSA

Instructor, Ron Smith and Associates

This presentation is for personnel who have the responsibility to properly document crime scenes and evidence through photography. It’s an introduction to camera controls, where there’re located, what they do, using modes other than automatic, adjustments to improve photos, and which photos to take using DSLR and P&S cameras. This lecture would benefit attendees with limited familiarity of evidence photography and camera operations, and those taking introductory and intermediate photography workshops later in the week.

BIS-06

10:30am-11:00am

What does it take to Fully Support NGI Interfaces and Capability?

Kaustubh Deshpande

Sr. Product Manager, Safran Morpho

The FBI has over the last few years updated its IAFIS system and expanded the capabilities to support multiple biometrics. The Next Generation Identification (NGI) system is available for State and Local Law Enforcement agencies to benefit from. Accessing the Finger and Face databases is a start but the capabilities are much more. In this presentation we will provide information on how agencies can make use of the full NGI functionality including EBTS 10, Rap Back, Tattoo and CJIS Security.

LPI-04

10:30am-11:00am

Logical Latent Analysis: The Axis Technique

Mack Brazelle, CLPE, CCSI

Fingerprint Specialist, Treasury Inspector General for Tax Administration, Beltsville, Maryland

This lecture will review a comprehensive yet intuitive approach to whorl pattern analysis. New research will be presented demonstrating the reliability of the axis techniques and its ability to predict what hand (right or left) a whorl pattern originated from.

GFF-07



1:00pm-1:25pm

All the Worlds a Stage: How to Over Come the Fear of Testifying

Mack Brazelle, CLPE, CCSI

Fingerprint Specialist, Treasury Inspector General for Tax Administration, Beltsville, Maryland

When you go to court are you nervous? Are you afraid you are going to make a mistake? More importantly can the jury sense that you are anxious? This lecture will discuss ways to overcome that natural anxiety that we all feel as we walk into the courtroom. Learn how to become a better performer on the biggest stage of all...the witness stand.

CSA-03

1:00pm-1:55pm

Teamwork: How Division Almost Destroyed A Homicide. Reconstruction and a Lesson in Reciprocity

Karen L. Smith

PhD Candidate/Lecturer, University of Florida, Gainesville, Florida

What happens when the proverbial ball gets dropped? This lecture discusses how the teamwork of four detectives moved a potentially lost cause violent homicide case through to a guilty verdict. Crime scene reconstruction will also be discussed.

BIS-07

1:00pm-1:55pm

Mobile Biometric Device Design: History and Challenges

Michael Rathwell

R/D Project Management, MorphoTrak

With smart mobile devices becoming a key computing platform, mobile biometric based devices have been integrated into law enforcement applications for more than a decade. Many government agencies have deployed and plan to deploy mobile biometric devices for agents in the field. Business demands have led to rapid advancements in mobile biometric device design. We will review the history of mobile biometric device design, from the consumer market using the biometric to secure the mobile device to law enforcement applications.

LPI-17

1:00pm-1:55pm

A New Paradigm for Fingerprint Reporting . . . without individualization

Henry Swofford, CLPE, CFWE

Chief, Latent Print Branch, DFSC-U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

For over 100 years, fingerprint evidence has been used as a valuable tool for the criminal justice system. Relying on the generalized premise of “uniqueness”, the forensic community has regarded fingerprint evidence as nearly infallible having the capacity to “individualize” the source of a fingerprint impression to a single individual. While the uniqueness of a complete record of friction ridge skin detail is generally undisputed, the extension of that premise to partial and degraded impressions has become a central issue of debate. Nevertheless, forensic science laboratories routinely use the terms “individualization” and “identification” in technical reports and expert witness testimony to express an association of a partial impression to a specific known source. Over the last several years, there has been growing criticism among the scientific and legal communities regarding the use of such terms to express source associations which rely on expert interpretation. The crux of the criticism is that these terms imply absolute certainty and infallibility to the fact-finder which has not been demonstrated by available scientific data. As a result, several authoritative scientific organizations have recommended forensic science laboratories not to report or testify, directly or by implication, to a source attribution to the exclusion of all others in the world or to assert 100% infallibility and state conclusions in absolute terms when dealing with population issues. Consequently, the traditional paradigm of reporting latent fingerprint conclusions with an implication of absolute certainty to a single source has been challenged. The underlying basis for the challenge pertains to the logic applied during the interpretation of the evidence and the framework by which that evidence is articulated. By recognizing the subtle, yet non-trivial differences in the logic, the fingerprint community may consider an alternative framework to report fingerprint evidence to ensure the certainties are not over or understated. This presentation will discuss the logic largely subscribed to by the fingerprint community along with the underlying basis to why it is the focus of challenge, present an alternative framework for the community to consider adopting which is epistemologically more compatible and defensible, and discuss how this transition was achieved within the Department of Defense without minimizing the value of fingerprint evidence. 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.



PEI-02

1:30pm-1:55pm

Introduction to Surveillance Photography

Scott Campbell, CSCSA

Instructor, Ron Smith and Associates

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.

GFF-16

2:00pm-2:25pm

Evaluation of ALS Camera Systems in Documentation of Forensic Evidence

Jiaqi Max Lu

Research Associate, Henry Lee Institute of Forensic Science, University of New Haven, West Haven, Connecticut

This research project was conducted to evaluate and compare the new ALS attached DSLR system and the external ALS device with DSLR. Our results indicate both systems will assist in the recognition and documentation of evidence. For the crime scene search, the external ALS device is more practical, while for documentation, the ALS attached DSLR system has its advantages. The detailed results of our findings will be reported.



BIS-05

2:00pm-2:30pm

When Hits Do Not Match

Ole Marius Steinkjer

Business Developer, Sopra Steria, Oslo, Norway

The field of identification is moving more and more towards multi-modal ABIS solutions. A change that gives many positive effects when looking at an individual as whole, and not just a fingerprint. However, introducing additional modalities also gives new challenges. What if the fingerprint and the face do not hit against the same candidate? What if the biometrics received belong to another person? It becomes complex quite fast. Through the talk, the speaker will discuss these challenges and look to describe how this can be organized to be both flexible and accurate.

CSA-04

2:00pm-3:00pm

Investigating a “Religious Cult” Homicide

Alison Hutchens, CCSA

Forensic Supervisor, Durham Police Department, North Carolina

This lecture is a case study on a double homicide involving a self-proclaimed leader of the “Black Hebrews.” Challenges of the investigation involved multiple uncooperative followers, delayed reporting, searching and recovering two bodies, and the challenge of latent print processing of the evidence.

LPI-09

2:00pm-3:00pm

AFIS Assisted Exclusion for Latent Prints – are we there yet?

Kaustubh Deshpande

Sr. Product Manager, Safran Morpho

Mike French, CLPE

Biometric Expert-Friction Ridge, MorphoTrak

With lights-out AFIS accuracy reaching new heights (as demonstrated by independent tests on the FBI NGI system), there has been a new emphasis to provide similar efficiency in the domain of one-to-one latent comparisons – the process of identifying latent prints even before they are searched in the AFIS database. Current processes are mostly manual and require significant effort from the experts with low efficiency and a high erroneous exclusion error rate. Latent Exclusion decision-making can be made significantly more efficient with a high performing matcher, and improve confidence in examiner decisions. In this presentation, we explore this topic from the capture of latent prints at the crime scene to the automation of reports and the management of the evidence prints to provide utmost efficiency to the experts. This would enable solving of additional cases that currently are untouched by improving efficiency in all case-work, and helping to lower examiner error rates.

PEI-01

2:30pm-3:00pm

Photography Tips and Tricks I've Learned

Scott Campbell, CSCSA

Instructor, Ron Smith and Associates

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.

BIS-01



3:00pm-3:25pm

Using NGI to Identify the Missing and Unknown Deceased

Susan Tuttle

Training Instructor, Federal Bureau of Investigation, Criminal Justice Information System, Clarksburg, West Virginia

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.

TPI-01



3:30pm-4:25pm

Ten Print Certification: Why the Fear?

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

I just compare prints for criminal histories and use AFIS. My agency won't pay me anything extra so why should I? How will certification help me? What do I need to study? We all have excuses, but in reality we fear the things we don't understand. In today's environment, certification is quickly becoming essential to courtroom survival. Certification shows you have been independently tested and proved you know your stuff. This lecture will discuss aspects of the application, testing and certification process. Once you understand the process and what you need to know, fear can be conquered. Members of the Ten Print Certification Board will be present for a quick Q&A session for those interested in pursuing their certification.

BIS-08

3:30pm-4:25pm

Utilizing Biometrics Technology to Strengthen Refugee Screening

Patrick Clancey

Federal Programs, MorphoTrust USA

This lecture will explore the current technologies in place to screen refugees and asylum seekers entering the U.S. Attendees will learn what the future holds for biometric technologies that can make this process smoother, faster, and more secure. The lecture will examine some of these technologies in depth, including Rapid DNA identification and traditional biometrics like face and iris images.

LPI-16

3:30pm-4:25pm

ENFSI MP2013 T3 Project “Developing the Outlines of Conducting Proficiency Tests and Collaborative Exercises for Fingerprint Units”

Dr. Aldo Mattei

Major of Carabinieri Force, Laboratory Deputy Director, Head of the Latent Print Unit, Carabinieri Scientific Investigation Service, Messina, South Italy

According to the document “Council conclusions on the vision for European Forensic Science 2020 [...]”, there is the need to sensitively improve the quality of forensic examinations, especially in the field of finger marks detection, visualization and individualization. All European fingerprint laboratories should have been ISO17025 accredited, in order to exchange the results of their expertise within European Union. Therefore, the conduct of proficiency tests and collaborative exercises at international level has to be seen as a mandatory activity for the fingerprint laboratories. Therefore, the fingerprint community have to set the rules of conducting proficiency tests and collaborative exercises. This lecture presents the experiences made within the ENFSI EFPWG since 2004 and the development of future guidelines in the field.

PEI-06

3:30pm-5:00pm

Digital Video Compression Basics

Keith Swanson, CVE

Detective, Ret. Forensic Video Analyst, Phoenix, Arizona

Basic lecture on video compression, how it works, how it is deployed and why.

BIS-02

4:30pm-5:00pm

Understanding the FBI's Next Generation Identification (NGI)'s Identity History Summary (IdHS)

Susan Tuttle

Training Instructor, Federal Bureau of Investigation, Criminal Justice Information System, Clarksburg, West Virginia

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.

LPI-02



4:30pm-5:00pm

What Can AFIS Do for You?

Thomas Wortman, CLPE

Physical Scientist/Latent Print Examiner, U.S. Army Criminal Investigation Laboratory (USACIL), Forest Park, Georgia

Are we using AFIS to its full potential? How can we further fold this technology into standard examinations? Can we use AFIS with Quality Control measures? It's time to embrace AFIS to its full potential. Discussion will be vendor non-specific and provide research examples to illustrate novel AFIS utilization.

CSA

7:00am-11:00am

Crime Scene Certification Testing

Testing for all levels of Crime Scene Certification will be held on Tuesday, August, 9th, beginning promptly at 7:00am. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at http://theiai.org/certifications/crime_scene/index.php

PEI

1:00pm-5:00pm

Forensic Video Certification Testing

Forensic Video certification testing will be held on Tuesday, August 9th, beginning promptly 1:00pm. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at <http://theiai.org/certifications/imaging/index.php>



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2016 PHOTOGRAPHY CONTEST

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At the 101st International Educational Conference, individuals will have an opportunity to participate in a Photo Contest sponsored by Forensic Pieces. There will be categories for Forensic and Creative entries. There are 1st, 2nd & 3rd place prizes awarded in each category. There will also be a People's Choice Award chosen by the conference attendees.

2015 PHOTOGRAPHY CONTEST WINNER



Tony Nguyen, winner and Jan Johnson, Forensic Pieces
Sponsored by Forensic Pieces

The theme for the Creative category this year will be “Bridges” in keeping with the theme of the conference, “Bridge...to a Bright Future”. Use your imagination and creativity.

Following are the photo entry specifics (please note there have been changes):

- Maximum two (2) entries per competitor
- Any subject matter may be used (e.g. crime scene and evidentiary photos for the Forensic category, and nature, artsy or personal photos utilizing the “Bridges” theme for the Creative category)
- Photos may be in black & white or color
- Size specifications: All sides must be at least 16” and no more than 24”
- Photos must be mounted on foam board with no borders, no frames and no matting.
- An 8½” x 11” Photo Contest Entry Label (provided upon registration) must be completed and mounted on foam board with no borders and submitted with your photo entry. The description/technical data should be no greater than 100 words, 16 point type.
- Participants may only win one award in each category
- Registration will open April 1 and the deadline will be July 27, 2016.

For further information, contact: Karen Cooper, Photo Contest Chairperson, E-mail: coopkaren@aol.com

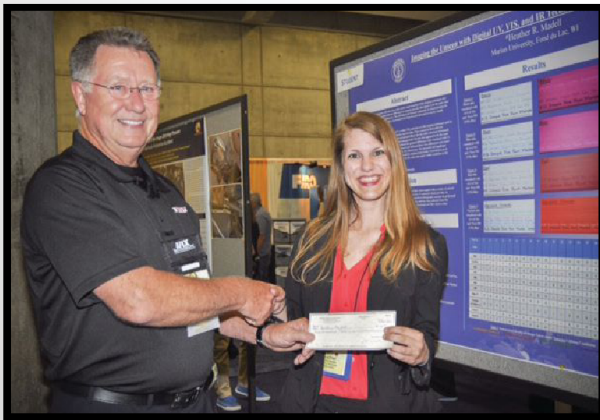
2016 POSTER PRESENTATIONS

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At the 101st International Educational Conference, individuals will have an opportunity to participate in the annual Poster Presentations, sponsored by Evident, and held during the vendor reception on Tuesday evening. There will be Regular and Student divisions. The Student division will be judged and a scholarship prize will be awarded.

2015 POSTER PRESENTATION WINNER



Heather Madell, winner and Michael Grimm, Sr., Evident
Sponsored by Evident Crime Scene Products



CALL FOR POSTER PRESENTATIONS

Topics in a field of identifications, crime scene search, or items of historical importance to identification are appropriate. Presenters bring captions, graphs, drawings, models, or other exhibits to assist in explaining/demonstrating a process, technique, idea, unusual case, or item of historical interest. The well-designed poster should inform the observer as to the basics of the subject matter, as well as any conclusions, therefore freeing the presenter to focus on discussion of essential elements of the work. The presenter does not give any formal lecture – but stands by his/her display as the observers pass and at that time reviews the particulars of the presentation with those individuals.

Note: Audio/video equipment (VCRs, televisions, computers, etc.) and other electrical components will not be provided for the poster presentations. A 4' X 8' board will be provided for display of each presentation. It is the responsibility of the presenter to insure his/her poster is picked up at the conclusion of the presentation.

Registration will open April 1 and the deadline will be July 27, 2016.

For further information, contact: Karen Cooper, Poster Presentations Chairperson, E-mail: coopkarenk@aol.com

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FPP

7:00am-9:00am

W1 \$25 Basic Training

Introduction to Forensic Gait Analysis

Dr. Ivan Birch

Professor, Sheffield Teaching Hospitals NHS Foundation Trust and Emeritus Professor of Human Sciences, South Yorkshire, England

Forensic gait analysis is increasingly being used as a part of criminal investigations. As the number of CCTV cameras in operation continues to rise, its use as an aid to identification is 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. **This workshop will not be offered again.**

FTT

7:00am-11:00am

W4 \$40 Basic Training

Examination and Comparison of Tires, Tire Treads and Tire Tracks

Dwane S. Hilderbrand, CLPE, CFWE

Consultant, Forensic ITC Services, LLC, Scottsdale, Arizona

This workshop is designed to present a series of interactive lectures using PowerPoint, Adobe Photoshop, and various other software programs. 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, along with a video. Numerous practical exercises are utilized and implemented to emphasize and critique the skills of the students to properly perform this level of training in tire track science. **This workshop will not be offered again.**

PEI

7:00am-11:00am

W46 \$35 Intermediate Training

Use of Filters and Basic Photography Skills as Applied to Fingerprint Photography

Larry Dow and Esther Neate

Applications Engineers, Foster + Freeman, USA

This workshop is also offered as W45 on Monday from Noon-4:00pm. The learning objectives are listed under W45.

LPD

7:00am-11:00am

W48 \$50 Advanced Training

Examination of Bodies for Fingerprints – Proven Methods, Tried and True

Brian Dalrymple, CLPE

Forensic Consultant, Brian Dalrymple and Associates, Coldwater, Ontario, Canada

This workshop is also offered as W47 on Monday from Noon-4:00pm. The learning objectives are provided under W47.

FII

7:00am-11:00am

W67 \$60 Basic Training

Forensic Facial Comparison Methods

Dr. Nicole A. Spaun

Principal Face Biometric Expert, MorphoTrak, Alexandria, Virginia

This hands-on workshop covers the methods of facial comparison utilized in facial identification examinations. These techniques can be utilized in many applications, to include when the student is tasked with reviewing one-to-many galleries from an automated system or performing forensic one-to-one facial comparisons. The workshop will review the methods and terminology recommended by the Facial Identification Scientific Working Group (FISWG). Additionally, the workshop will begin with an overview of the underlying image science one must understand when analyzing the very 3D human face as it appears in 2D images. Students are expected to have basic familiarity with Adobe Photoshop or similar image processing software.

This workshop will not be offered again.

PEI

7:00am-11:00am

W87 \$30 Basic Training

Crime Scene Camera Basics

Michael J. Hulihan and Ted McDonald

Senior Forensic Sciences Instructors, Federal Law Enforcement Training Centers, Brunswick, Georgia

Paul Kasper, CFPH

Forensic Photography Instructor, Federal Law Enforcement Training Centers, Brunswick, Georgia

To provide law enforcement personnel with the basics of crime-scene photography principles and equipment. This workshop will help those who need a basic understanding 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.

This workshop is also offered as W88 following this workshop from 1:00pm-5:00pm.

LPI

8:00am-10:00am

W32 \$30 Intermediate Training

Distortion: Analysis and Discussion (Cause and Effect)

Sandra Siegel, CLPE

Sr. Latent Print Examiner, Houston Forensic Science Center, Texas

Friction ridge skin does not reproduce exactly when recorded. In almost every recording of friction ridge detail there is some type of distortion. Fortunately, most of the time distortion does not detract from identifications being made. An important part of any fingerprint or latent print training program is the recognition and analysis of distortion to determine its impact in the examination and comparison of friction ridge impressions and then describing it to other examiners or in a courtroom setting.

This workshop is designed for the fingerprint 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 'Effect', and the description of the possible 'Causes' of the distortion. After a power point presentation, the students will be divided into teams. They will be given sets of friction ridge prints for analysis and be asked to present the observed 'Effect' and describe the possible effect. The objective is for the student to analyze, document, and articulate different aspects of friction ridge distortion. Magnifiers are not needed.

This workshop will not be offered again.

LPD

8:00am-10:00am

W52 \$30 Basic Training

Indanedione/Zinc Chloride...Better than DFO and Ninhydrin?

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

Amino acid reagents are commonly used for the development of latent fingerprint impressions on porous surfaces. DFO and Ninhydrin are well established for use in forensic labs, however Indanedione/Zinc Chloride is not as widely accepted or used. This workshop will look at a comparison using all three techniques individually, as well as sequential order. Recent publications relating to these techniques will be discussed.

This workshop will not be offered again.

DEE

8:00am-11:00am

W33 \$45 Basic Training

Introduction to Computer Forensics

Jerry W. Hoover

Cybersecurity Professor, Allegany College of Maryland, Ridgeley, West Virginia

The modern crime scene always contains digital evidence, from cellphones, to thumb drives, to laptops, and even surveillance video. Many crime scene techs today recover DE just like everything else and it often sits in a box in the evidence room, especially if the crime is minor or not connected. This workshop will show you how to soundly recover digital evidence and use freely available computer forensic tools to examine it. You can make sure your department has everything it needs to press the case without worrying that the perp will plead out while you wait for the state lab. This will also give you the tools to recover deleted files when the local Barney Fife hits the wrong button. **This workshop will not be offered again.**

BPA

8:00am-11:00am

W37 \$35 Basic Training

Bloodstains on Fabrics and the Use of an ALS

Craig C. Moore, CBPA

Bloodstain Pattern Examiner, See More Forensics, Ontario, Canada

Most people will note bloodstains on white fabric, such as the seemingly smooth linen of a 100% cotton T-shirt however this workshop involves a collection of unusual red and black colored fabrics constructed of blended fibers and textured weaves. This workshop will begin with a brief overview of fibers and fabric followed by a review of electromagnetic energy. The practical exercises will deploy three different wavelength light sources and conclude with a live demonstration of a fourth wavelength source being an infrared light and camera system. This workshop is designed to educate the attendee on approaches that can be utilized in both the field and the lab with the examinations of cloth items for potential bloodstain evidence. The previously prepared bloodstained fabric samples are derived with porcine blood treated with heparin collected and packaged by an accredited laboratory facility. Although it is deemed safe, universal safety precautions will be followed. This workshop is open to all attendees but enrollment is limited to 24 people. **This workshop will not be offered again.**

PEI

8:00am-11:00am

W59 \$30 Intermediate Training

Photography of Invisible Evidence Using UV & IR Techniques

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

Photography of Invisible Evidence Using UV & IR Photography, Discovery and Preservation of invisible evidence can be accomplished through the use of Infrared and Ultra-violet photography techniques. New breakthrough in this technology allows the investigator more latitude in the recovery of this type of evidence. Hands on approach will be used for the photographic capture of GSR, bold stains, fingerprints and questioned documents as evidence. Students will work in teams using UV/IR Photographic Equipment. **This workshop will not be offered again.**



BPA**8:00am-11:00am****W83 \$30 Basic Training****Fluid Dynamics as it Relates to Dripping Blood****Jan Johnson, CSCSA**

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

Bloodstain pattern recognition and identification are important pieces of the puzzle when attempting to reconstruct events that occur in 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 also target surface/texture considerations. A review of the recommended Bloodstain Pattern Terminology and requirements for the IAI Bloodstain Pattern Certification, as well as bloodstain pattern case studies will also be presented in this workshop. This workshop is geared towards the crime scene technicians, investigators, detectives, medical examiners and/or medical examiner investigators, as well as laboratory analyst and other forensic professionals associated with crime scene investigation. Safety Note: Aprons, gloves, safety glasses, and masks will be provided for students enrolled in this workshop. Non-human blood will be utilized for the experiments. Please bring your camera if you wish to document these experiments.

This workshop is also offered as W84 on Thursday from 8:00am-11:00am.

FTT**8:00am-11:00am****W92 \$30 Intermediate Training****Conclusion Expression and Report Writing Workshop for Footwear and Tire Track Examiners****Lesley Hammer, CFWE**

Forensic Consultant, Hammer Forensics, Anchorage, Alaska

Expressing conclusions and writing reports are ever evolving for most examiners, and this workshop aims to assist this process. Requirements such as those set by laboratory guidelines, accreditation, and discipline standards, may be met with minimalistic reports that are limited to brief statements, cut and paste conclusions or drop down menus with generic wording. However, one of the most important qualities of a report is that it clearly conveys findings and opinions to the users or readers of the reports. To achieve this takes additional explanations such as; explanation of the characteristics observed, their value and degree of correspondence, the provision of relevant background or foundational information, and in some cases, the use of photographs and attachments. This workshop will provide some examples and ideas and allow for practice writing conclusions and constructing reports in both an individual exercise and a group discussion format. All levels of footwear examiners are welcome.

This workshop will not be offered again.



FPP

9:00am-11:00am

W2 \$25 Intermediate Training

Intermediate Forensic Gait Analysis

Dr. Ivan Birch

Professor, Sheffield Teaching Hospitals NHS Foundation Trust and Emeritus Professor of Human Sciences, South Yorkshire, England

Forensic gait analysis is now an established option as a contributor to identification in criminal investigations. As the number of CCTV cameras in operation continues to rise, its use 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.

This workshop will not be offered again.

FPP

1:00pm-3:00pm

W3 \$25 Advanced Training

Advanced Forensic Gait Analysis

Dr. Ivan Birch

Professor, Sheffield Teaching Hospitals NHS Foundation Trust and Emeritus Professor of Human Sciences, South Yorkshire, England

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, and on the reports produced for court. 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 analyzing footage, and how the notes can be used in the construction of a report 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 forensic gait analysis report writing for court use. 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. **This workshop will not be offered again.**



Register Now, Click Here

LPD

1:00pm-3:00pm

W53 \$30 Basic Training

Developing Latent Prints on Firearms, Cartridges and Spent Cartridge Cases ... Does Anything Really Work?

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

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 on the topic. Discussion will include realistic expectation and success with current methods. Development techniques will include:

- Cyanoacrylate
- Dye Staining
- Forensic Light Sources
- Camphor Smoke Development
- Gun Bluing
- Fingerprint Powder

This workshop is also offered as W54 on Wednesday from 8:00am-10:00am.

BPA

1:00pm-3:30pm

W81 \$30 Basic Training

What's the Angle with this Angle: Trigonometric Double Speak?

Jan Johnson, CSCSA

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

Whether you are dealing with bloodstain patterns in the shape of round, oval, or elliptical stains or bullet holes from projectile perforations in vehicles, walls, or other intermediate targets, you are always trying to ascertain what the angle of incidence is in each of these various scenarios in order to reconstruct events in violent crime scenes. Whether you use simple trigonometric functions using width and length of the stains or holes, lasers, or dowel rods with angle finders, all of these methodologies have their usefulness and applied practicalities. This workshop will provide hands-on experience with scientific experiments that demonstrate the accuracy of using any or all of the mentioned methodologies whether you are dealing with bloodstains or with bullet holes. Actual case studies will also be presented in this workshop demonstrating the correct methodology to utilize and/or verify any of your preliminary angles in your case work. This workshop is geared towards the crime scene technicians, investigators, detectives, as well as laboratory analyst and other forensic professionals associated with crime scene investigation. Safety Note: Aprons, gloves, safety glasses, and masks will be provided for students enrolled in this workshop. Non-human blood will be utilized for the experiments. Please bring your camera if you wish to document these experiments. This workshop is also offered as W82 on Thursday from 1:00pm-3:30pm..

PEI

1:00pm-5:00pm

W8 \$30 Intermediate Training

Using HDR and Panoramic Photography in Forensic Investigations

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana” Forensic Photography has been evolving ever since the very first forensic photograph was taken over 100 years ago. The evolution has continued from film to almost entirely digital photography in forensics. With this age of digital photography investigators now have an advantage over film with the ability to capture forensic images and being able to view them right after an image has been taken. Now the photographer can see if the image captured has the needed detail to make an excellent forensic image. With the use of computers and digital cameras investigators are able to adjust the overall tonal range of an image using the HDR (High Dynamic Range) technique & Panoramic Photography for criminal investigations. **This workshop will not be offered again.**

LPI

1:00pm-5:00pm

W18 \$40 Intermediate Training

Making Optimal Decisions in Identifications and Exclusions:

A Scientific Approach

Dr. Thomas Busey

Professor, Indiana University, Bloomington

John Vanderkolk

Laboratory Manager, Indiana State Police Laboratory, Ft. Wayne

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. **This workshop will not be offered again.**



Register Now, [Click Here](#)

LPD**1:00pm-5:00pm****W24 \$40 Basic Training****Blood Prints - To Process or Not to Blood Process?****Shannon E. Prince, CLPE and Kelli Edmiston**

Physical Scientists/Forensic Examiners, Federal Bureau of Investigation Laboratory, Quantico, Virginia

This workshop is one bloody good idea! All the questions regarding latent print blood processing for crime scene personnel, students, and latent print examiners will be discussed and answered. Do I process at the scene or back at the laboratory? Can I use a presumptive blood process for friction ridge detail? What should I use on dark surfaces? Can I use a white gel lifter to visualize a blood print? Do you love LCV as much as I do? What works on the adhesive side of tape? What is more effective – Merbromin or Coomassie Brilliant Blue? Does anyone use Crowle's Double Stain? The purpose of this workshop is to determine which processing technique will provide the best results in visualizing latent prints in blood at a crime scene or in the laboratory. The workshop includes a lecture with all of the latent print blood processes and casework examples. Then, the students will experiment with various types of "evidence" to determine what process and light source best develops a latent print. **This workshop is also offered as W25 on Wednesday from 7:00am-11:00am.**

FTT**1:00pm-5:00pm****W29 \$60 Intermediate Training****Application of Photoshop and Bridge to Footwear and Tire Impression Evidence****Brian C. McVicker**

Forensic Footwear and Tire Examiner, Federal Bureau of Investigation Laboratory, Quantico, Virginia

The use of digital images in casework poses specific challenges for forensic footwear and tire examiners – hundreds of images must be reviewed to identify the best impression evidence images and those images must be processed in order to use them for comparison purposes. Adobe Photoshop and Bridge are the most common imaging tools used by forensic professionals. This hands-on workshop is targeted at footwear and tire examiners with intermediate or advanced experience using Photoshop and Bridge. The objectives of this workshop are to provide attendees with: a standard workflow for handling images in casework, specific image-processing techniques relevant to footwear and tire 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.

This workshop will not be offered again.**ART****1:00pm-5:00pm****W75 \$50 Basic Training****Life Drawing Seminar****Jorge Molina**

Texas Ranger Forensic Artist, Texas Department of Public Safety, Austin

The foundation of any portrait is observation, and observation from life is pivotal to capturing a likeness. As such, this workshop will reinforce the notion of life drawing as a means to supplement the forensic artist's ability to accurately render a human face. In this life drawing seminar, attendees will have the opportunity to draw a portrait from a live (clothed) model in a simulated studio setting. The format of the workshop will be divided into a portrait drawing demonstration followed by a hands-on portrait drawing session with individualized instruction (upon request). This is a beginner level workshop intended for forensic artists and others hoping to refine their technical drawing skills. Quick sketch techniques will be emphasized in a supportive and friendly environment designed to diminish any concerns about drawing from life. Previous artistic training is not required. Attendees may bring media of their choice, but preference will be given to charcoal. **This workshop will not be offered again.**

FII

1:00pm-5:00pm

W77 \$60 Intermediate Training

Face Comparisons Using Facial Recognition Systems

Tina Daugherty

Training Instructor, Federal Bureau of Investigations, Criminal Justice Information Systems Division, Clarksburg, West Virginia

Face Comparisons using Facial Recognition Systems. Tina Daugherty, Training Instructor, FBI CJIS. 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. **This workshop will not be offered again.**

BPA

1:00pm-5:00pm

W85 \$30 Advanced Training

Analysis of Complex Patterns and BPA Scenarios

Holly M. Latham, CLPE, CBPA

Forensic Scientist III, Kansas Bureau of Investigation, Great Bend

Cory D. Latham, CSCSA, CBPE

Senior Special Agent, Kansas Bureau of Investigation, Great Bend

Introductory bloodstain courses offer an analyst the tools to recognize straightforward, textbook type patterns, but what happens when things aren't that simple? This workshop will address complex patterns in BPA, and explore their implications through casework examples and scenarios. Overlapping patterns, sequencing considerations and limitations, and examination of bloodstains on different fabric types will be covered. The class will be given case examples and simulated scenarios, and then be asked to evaluate pattern identification, what sequencing can be done, interrelationships of evidence and alternate hypothesis consideration. Students are expected to have a basic understanding of bloodstain pattern analysis. **This workshop will not be offered again.**

PEI

1:00pm-5:00pm

W88 \$30 Basic Training

Crime Scene Camera Basics

Michael J. Hulihan and Ted McDonald

Senior Forensic Sciences Instructors, Federal Law Enforcement Training Centers, Brunswick, Georgia

Paul Kasper, CFPH

Forensic Photography Instructor, Federal Law Enforcement Training Centers, Brunswick, Georgia

This workshop is also offered as W87 prior to this workshop from 7:00am-11:00am. The learning objectives are provided under W87.

LPI-05

7:00am-7:25am

Magnetic North and Latent Analysis

Mack Brazelle, CLPE, CCSI

Fingerprint Specialist, Treasury Inspector General for Tax Administration, Beltsville, Maryland

This lecture will cover a unique approach to analyzing the delta area of latent fingerprints. Concepts to be covered are; delta pattern orientation, the funnel effect and magnetic north. Understanding these techniques will improve your effectiveness and confidence as a latent print examiner.

GFF-10

7:00am-7:55am

Understanding and Calculating Error Rates in Pattern Evidence

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

Many “error rate studies” now exist in the literature, but what is an error rate? This lecture will explore different types of error rates, what they mean, how to calculate them, and how to appropriately use them in the courtroom.

LLS-01

7:00am-7:55am

Leader Development - 360 Degree Learning

Deborah Leben, CLPE

Laboratory Director, US Secret Service, Washington, DC

This lecture will offer a 360 degree approach to leader development. Formal classroom instruction is often required, and is a part of most leader development programs, however, individuals learn effectively through a variety of experiences. A holistic approach offering optimal learning strategies and important leader competencies will be discussed.

BIS-09

7:00am-7:55am

How to Survive the AFIS Upgrade Apocalypse

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety, Phoenix, Arizona

Many examiners preparing for the impending apocalypse of an AFIS upgrade have no concept of the challenges that await them. The horrors begin with the preparation of a Requirements document to cover all possible, imaginable, or inconceivable issues that may arise with the new system. The terrors of testing follow. Can you dedicate the time, energy, and attention to test every feature of the new system that any examiner in any location may use? The migraines of data migration follow. Will every field of every record from an outdated system be accessible after migration to an unknown and untested system? If you have survived the process to this point, you will surely be destroyed as the new system goes Live. How can you possibly monitor, troubleshoot, test, retest, re-retest, implement, and find the root cause of hundreds of bugs, failures, and problems? And most importantly, is it in the Requirements document? This lecture discusses how to best prepare and what to look for.

GFF-02

7:00am-11:00am

Forensic Entomology at the Crime Scene

Dr. Jason H. Byrd

Associate Professor, University of Florida College of Medicine, Gainesville, Florida

Dr. Trevor Stamper

Director of Forensic Science, Purdue University, West Lafayette, Indiana

Dr. Lauren Weidner

Post-doctoral Research Associate, Purdue University, West Lafayette, Indiana

This lecture series will provide the participant with a review of the various applications of forensic entomology, implications of entomological evidence, understanding the entomology report, as well as collection of entomological evidence at the crime scene and at autopsy.

LPI-15

7:30am-8:25am

Revolutionary Procedures / Evolutionary Writing – A Panel Discussion

Moderator: Diana Tabor Luebke, CLPE

Latent Print Examiner, Hennepin County Sheriff's Office Crime Laboratory, Minneapolis, Minnesota

Panel: Marcus Montooth, CLPE

Latent Print Unit Supervisor, Indiana State Police Laboratory, Evansville

Nova Grilli, CLPE

Latent Print Supervisor, City of Charleston Police Department, South Carolina

Karley Hujet, CLPE

System Latent Print Technical Lead, Wisconsin State Crime Laboratory, Madison

The latent print discipline has been evolving significantly and our policies must reflect the changes. This panel discussion will cover drafting and adapting policies and procedures from concept to phrasing and then implementation. The panel represents different sizes of agencies and will focus on the challenges that each agency has tackled.

GFF-20



8:00am-8:30am

What is Behind the Curtain? Using Elementary Skills to Convey the Real Weight of Evidence

Dr. Hari Iyer and Dr. Steven Lund

Mathematical Statisticians, Statistical Engineering Division, National Institute of Standards & Technology, Gaithersburg, Maryland

Whether approached through verbal conclusions or a numeric likelihood ratio, clearly understanding and communicating the weight of evidence remains a challenging task. In this talk we will illustrate how a guided tour through available data using simple summaries and demonstrations, including counting, can be used to clearly convey the weight of evidence.

Wednesday, August 10

LECTURES



BIS-03

8:00am-8:30am

Dispositions - The Missing Piece of the Criminal History Puzzle

Susan Tuttle

Training Instructor, Federal Bureau of Investigation, Criminal Justice Information System, Clarksburg, West Virginia

In a criminal history record, the disposition of a criminal offense is vital to understanding how the arrest was concluded. Unfortunately, with many criminal history records at the FBI CJIS Division, dispositions are never received to provide closure to arrests within those records. In this presentation, the attendee will learn the importance of the information contained within the disposition, the negative impact that can occur without this critical information and different methods to submit dispositions to CJIS.

LLS-03

8:00am-9:00am

Leading People and Leading Change

Steven O'Dell, CSCSA, CBPA

Director, Forensic Services Division, Baltimore Police Department, Maryland

Leading People and Leading Change is a lecture for today's current forensic laboratory leader or future leader presented by Steven O'Dell, Director of the Forensic Services Division of the Baltimore Police Department. The purpose of this lecture is to discuss styles and strategies in leadership to cultivate successful forensic laboratory relationships to get things done and improve the work environment.

LPI-01



8:30am-9:00am

Test Taking Strategies for the New CLPE Certification Test ... you can do it!

Thomas Wortman, CLPE

Physical Scientist/Latent Print Examiner, U.S. Army Criminal Investigation Laboratory (USACIL), Forest Park, Georgia

With the changes in the comparison portion of the IAI LPE Certification Test, now is the best time to take the test. This presentation will cover a test taking strategy for the new IAI LPE examination as well as discussing why it is not as intimidating as it once was.

FTT-23

9:00am-9:55am

Barefoot Morphology Evidence, from the Scene to the Courtroom

Martin Lelièvre

Forensic Identification Operations and Policy Analyst, Integrated Forensic identification Services, Royal Canadian Mounted Police, Ottawa, Canada

Impressions of bare or socked feet from a scene, or from the insole of footwear that is associated with an investigation may need to be compared to the impressions of a known source in order to evaluate the potential support for exclusion or association hypothesis. This session will provide an overview of best practices in the recording of 2 and 3 dimensional barefoot morphology evidence, as well as the recording of known standards. A demonstration of the application of ACE-V in the context of Barefoot Morphology will provide the participants an opportunity to gain an understanding of the potential benefits of using a systematic process in the examination of physical evidence. Some of the inherent qualities and limitations of Barefoot Morphology evidence will be discussed, as well as examples of the range of opinions examiners may be able to reach.

Register Now, Click Here

CSA-05



9:00am-11:00am

Crime Scene Certification Board Meeting - Open Discussion

Moderator: Rebecca Daher, CSCSA, CSCB Chair

Senior Forensic Specialist, Orange County Sheriff's Department, Santa Ana, California

Panelists: Crime Scene Certification Board Members

This presentation will provide the attendee with the most current information on the Crime Scene Certification program. Topics will include certification requirements, new test materials, the testing process, recertification, and the crime scene reconstruction program. Attendees will be afforded ample opportunity to address these and other issues with the panelists. The Crime Scene Certification Board open meeting will be immediately after the panel discussion.

LLS-04

9:30am-9:55am

You Said ... the Survey Said..." - Perceptions and Reality - Using Surveys in your Organization to Increase Awareness and Communication

Eliot Springer

Deputy Director, New York Police Department Police Laboratory, New York

Understand some of the reasons for the difference between management's perceptions and analysts' perceptions. Based on practical real life experience, this presentation will discuss the use of surveys for gaining insights into improving communication and increasing awareness within the forensic laboratory setting. Some of these ideas can be adapted to your organization in order to assist in making improvements. Participants will be encouraged to add ideas from their own experience.

LPD-08

9:30am-10:25am

Conducting Validation Studies in ISO 17025 Accredited Laboratories - A Panel Discussion

Robert Ramotowski

Chief Forensic Chemist, U. S. Secret Service, Washington, D.C.

Kyle Tom

Validation Program Manager Latent Print, Federal Bureau of Investigation, Quantico, Virginia

Henry Swofford, CLPE, CFWE

Chief, Latent Print Branch, DFSC-U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

This will be a panel discussion during which panel members will give a brief presentation and then initiate a question and answer session with the audience. 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.

LLS-02

10:00am-11:00am

Qualities of a Leader – A Panel Discussion

Moderator: William Schade, CLPE

Biometric Records Manager, Pinellas County Sheriff's Office, Clearwater, Florida

Panel: Ron Smith, CLPE

President, Ron Smith & Associates, Inc.

Lauren Reed

Director, DFSC-U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

John R. Vanderkolk

Laboratory Manager, Indiana State Police Laboratory, Fort Wayne

John Maxwell, a recognized authority on leadership believes "Leaders must be close enough to relate to others, but far enough ahead to motivate them." In this panel presentation, managers working in forensic disciplines will discuss some of the 21 Indispensable Qualities of a Leader that Maxwell has identified and suggest how to put them into daily practice in the forensic environment. Audience participation in the discussion will be encouraged and both current and future leaders should plan to share collective experience and wisdom.

FTT-09

10:00am-11:00am

Barefoot Evidence: An Overview for the Crime Scene Investigator

William Bodziak, CFWE

Bodziak Forensics, Palm Coast, Florida

Although most foot-related evidence produced and recovered at crime scenes relates to footwear, a small percentage of serious crimes involve impressions of the naked or sockclad foot. An overview of this evidence relating to its recovery, the process of obtaining known standards, and examination related topics presented along with casework examples will provide an awareness and valuable information for crime scene investigators.

LPI-11

10:30am-11:00am

ACEware: Standardizing ACE-V Documentation

R. Austin Hicklin

Fellow at Noblis, Falls Church, Virginia

There is no widely-used standard method of detailed documentation of the latent print examination process. ACEware addresses that problem by providing a standards-based platform for use in training examiners in ACE-V documentation — as well as for use by experienced examiners in documenting actual casework. ACEware builds upon the Universal Latent Workstation by providing functionality for training, for documentation of non-AFIS casework, and for creating research/training datasets. ACEware is sponsored by NIJ and developed by Noblis.

FTT-01

1:00pm-1:25pm

An Evaluation of Five Different Two-Dimensional Test Impression Techniques

Dr. Christine Snyder, CSCSA, CFWE

Crime Scene Analyst and Impression Examiner, Seminole County Sheriff's Office, Sanford, Florida

Five different two-dimensional test impression making techniques were compared to determine which technique reproduced the highest quality randomly acquired characteristics and the most accurate size of the footwear outsole. The results of the research will be discussed.

GFF-08

1:00pm-1:55pm

Personal Financial Planning for the Forensic Professional

Mack Brazelle, CLPE, CCSI

Fingerprint Specialist, Treasury Inspector General for Tax Administration, Beltsville, Maryland

Do you have a financial plan? Did you know your job provides you with all the tools you need to make your money grow over time? Unfortunately, most people have never had the opportunity to attend a class on money and investing. This lecture is your opportunity. It is geared towards teaching both the young and “experienced” forensic professionals the importance of having long term financial goals. No matter what forensic discipline you practice this talk could be the most important you attend all week.

LPI-13

1:00pm-1:55pm

Complex Issues when Dealing with Bloody Fingerprints

Dr. Glenn Langenburg, CLPE

Forensic Scientist, Elite Forensic Services, LLC, St. Paul, Minnesota

This presentation will cover some of the more complex issues dealing with bloody friction ridge impressions. Were the impressions made in pre-existing blood on the surface? Were they made with blood at all? Were they made with human or animal blood? How do the properties of blood affect the appearance of bloody impressions? We will explore these issues and more, while looking at some case examples and research studies.

LPI-27



1:00pm-2:55pm

Latent Print Certification Board (LPCB): Open General Meeting

Moderator: Stephanie Howard, CPLE, LPCB Chair

Senior Forensic Analyst, Forensic Identification Support Services, Ontario Provincial Police, Orillia, Ontario, Canada

Panelist: Latent Print Certification Board Members

This presentation will provide the attendee with the most up to date information on the Latent Print Certification Program. Topics will include certification requirements, new test materials, the testing process and recertification. Attendees will have ample opportunity to address any issues or concerns relating to the Latent Print Certification Program with members of the LPCB.

BIS-04

1:00pm-3:55pm

Biometric Information Systems (BIS) Subcommittee: Open General Meeting

Moderator: B. Scott Swann, Chair, Biometric Information Systems (BIS) Subcommittee

Senior Director of Innovation, MorphoTrak

Panelists: BIS Subcommittee Members

The Biometric Information Systems Subcommittee will meet publicly to discuss issues relevant to the biometrics community. Invited speakers will address issues ranging from biometrics standards developments to recent testing, technological advances, and best practices projects.

FTT-03

1:30pm-2:25pm

Evidence Beneath Your Feet, a Comparison of Three Different Dust Lifting Techniques

Jan LeMay, CLPE, CFWE

Criminalist II, Northern Colorado Regional Forensic Laboratory, Greeley, Colorado

This presentation will instruct and demonstrate three lifting techniques for dust impressions: electrostatic dust lifter, gelatin lifter and vinyl cling film. Attendees will be provided the opportunity to practice with the three techniques.

LPI-07

2:00pm-2:30pm

I Know it When I See it – is Complexity the Key to Creating a Workable Documentation Policy for Latent Prints?

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

This lecture will present the arguments for contemporaneous documentation, describe the role of complexity in developing a documentation policy, present a roadmap for creating an operationally feasible policy, and present preliminary data from experimentation on reaching consensus regarding mark complexity.

FTT-18

2:30pm-2:55pm

The Importance of Photography to Footwear Impression Evidence Examination

Cindy Homer, CLPE, CFWE, CCSA

Forensic Scientist, Maine State Police Crime Laboratory, Augusta, Maine

This presentation will cover the role photographs play in the quality of a footwear impression comparison. It will not focus so much on the “how to” as it will on “why” the photographs are so vitally important to the success of the comparison. This presentation will be of interest to anyone interested in the information a footwear examiner uses when doing comparisons.

LPI-21

3:00pm-3:25pm

Measuring Latent Print Examiner Productivity Using Linear Regression Analysis

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety, Phoenix, Arizona

When crime lab administrators try to measure the productivity of latent print examiners, a common complaint is that counting cases doesn't accurately represent how much work was actually performed. Not all cases are the same. A single lift card submitted from the field may not even have any comparable latent prints. Another case may have dozens or hundreds of items to process, latent prints to compare, and AFIS searches to launch. Including further information in addition to case numbers can allow crime lab administrators to measure productivity more accurately. Essentially, each latent print unit activity is worth a certain number of productivity points. A linear regression analysis of all critical activities and examiner timesheets can establish the coefficients to generate these point scores.

FTT-10

3:00pm-3:55pm

3D-Forensics - Mobile High Resolution 3D-Scanner and 3D Data Analysis for Footwear and Tire Track Evidence

Stephen Crabbe

Managing Director, Crabbe Consulting Ltd, Germany

Dr. Peter Kühmsted

Group Manager, Fraunhofer IOF, Germany

Max Lucas

Project Manager, LUCAS Instruments GmbH, Germany

The presentation covers the latest results and plans to provide a mobile high-resolution 3D scanning system for the recovery and analysis of footwear and tire track trace evidence left at crime scenes. It includes details on: the measurement principle, the prototype 3D-scanner and analysis software, test and evaluation results to date, and the steps being undertaken to demonstrate the validity of the 3D-system for the purpose of providing evidence to criminal justice systems.

LPI-10

3:30pm-4:25pm

Utilizing a Checklist Approach for Decision-Making in Latent Print Examination

John P. Black, CSCSA, CFWE, CLPE

Owner, Black & White Forensics, LLC, Olanta, South Carolina

Checklists are used in many domains to guide accurate decision-making. This approach can be highly successful because it 'forces' the practitioner to consider multiple aspects of the information being evaluated. Latent print examiners also strive for accuracy and can benefit from a checklist approach. The preponderance of responses to the checklist will drive the conclusion and create a transparent record of the reasoning behind the conclusion. Perhaps the most significant impact is realized with increased confidence and accuracy when making exclusion decisions.

GFF-24

4:00pm-5:00pm

CSFO Update

Kenneth F. Martin, CLPE, CSCSA, CFWE, CBPE

Detective Lieutenant, Massachusetts State Police (retired)

Beth Lavach

President, E.L.S. and Associates

In response to the NAS report, Senator Patrick Leahy introduced legislation before the United States Senate 2011 in an effort to strengthen forensics in the US. This lecture will cover not only the history of the Leahy legislation but where we are now and where we may be heading. Upon conclusion of the presentation a question and answer session will take place to answer questions.

FTT-14

4:00pm-5:00pm

Quantitative 3D Measurements of Impression Evidence with Plenoptic (Computational) Imaging

Maritoni Litorja

Research Chemist, National Institute of Standards and Technology, Gaithersburg, Maryland

Plenoptic cameras preserve directional information of incoming light rays. Post-acquisition computation of images yield depth estimates (dimension) and enable scene reconstruction under different optical configurations (aperture, focus) from the actual acquisition. We will (i) describe plenoptic cameras and computational photography, ii) describe calibration and depth estimation methods, (iii) present results on the accuracy of length measurements derived from light field data, and (iv) show qualitative comparison of 2D and 3D images of forensics-relevant impressions.

LPI-20

4:30pm-5:00pm

Throwing the Baby Out with the Bathwater? Instead Strive To Create a Supportive Latent Print Environment

Amanda Atkins, CLPE, CSCSA, CFWE

Lead Latent Print Examiner, Latent Print Branch, DFSC-U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

This presentation will discuss the current state of latent print examination from a sociological standpoint. Positioned within a punitive system, forensic science practitioners are often the ones that assume responsibility for mistakes or unintentional erroneous results. This tendency to put responsibility on the shoulders of the analyst makes it difficult for laboratories and the forensic science community to learn from these adverse events, address their root causes, and implement system level improvements. In order to better serve justice, the forensic sciences must develop a latent print culture that facilitates open reflection and resolution of issues in a safe and non-adversarial environment. 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, United States Department of Defense, or United States Department of Justice.

PEI

7:00am-11:00am

Forensic Photography/Imaging Certification Testing

Forensic Photography certification testing will be held on Wednesday, August 10th, beginning promptly 7:00am. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at <http://theiai.org/certifications/imaging/index.php>

FTT

9:00am-11:00am

Footwear Certification Testing

The IAI Footwear Certification Committee will offer footwear certification testing on Wednesday, August 10th, beginning promptly at 9:00am. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at <http://theiai.org/certifications/imaging/index.php>

LPI

7:00am-11:00am

W20 \$60 Basic Training

Photoshop for Fingerprints: Level 2

Mark Zabinski, CLPE, CSCSA

Criminalist II, Rhode Island State Crime Lab, Kingston

Scott Osborn

Senior Scientific Officer, Forensic and Data Centres, Australian Federal Police, Australia

This workshop has been designed to provide latent print examiners with a wider skill-set of digital imaging techniques. You will look at steps and procedures to optimise the recovery of latent print evidence from a range of background interference's. Techniques covered include;

- Use of image stacking
- Image synthesis
- Subtraction techniques
- Introduction in the use of Image J Fast Fourier Transform (FFT) to maximise the recovery important latent print detail.

This workshop is designed to enhance the skill level of those working in the latent print analysis field and may also be beneficial to those routinely using image adjustments in the course of their work. It is desirable that participants have a basic knowledge in regards to navigating their way around a windows operating environment and Adobe Photoshop. **This workshop will not be offered again.**

LPD

7:00am-11:00am

W25 \$40 Basic Training

Blood Prints - To Process or Not to Blood Process?

Shannon E. Prince, CLPE and Kelli Edmiston

Physical Scientists/Forensic Examiners, Federal Bureau of Investigation Laboratory, Quantico, Virginia

This workshop is also offered as W24 on Tuesday from 1:00pm-5:00pm. The learning objectives are provided under W24.

LPI

7:00am-11:00am

W69 \$60 Intermediate Training

Universal Latent Workstation - Intermediate/Advanced

Kimberly Bolyard, CTPE

Training Instructor, Federal Bureau of Investigation/Criminal Justice Information Services Division, Clarksburg, West Virginia

This workshop will focus on the features and functionality of the Universal Latent Workstation (ULW) software. The ULW software enables latent examiners to search the FBI's Biometric Repository by finger or palm images. Some of the information covered in this session includes: administrative functions; encoding minutiae points; adjusting file penetration; designating repositories for searches; and conducting comparisons with possible candidates returned from the NGI. 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). **This workshop will not be offered again.**

FTT

7:00am-11:00am

W93 \$40 Intermediate Training

Introduction to Footwear Examination and Comparison Workshop

Ron Mueller, CCSI, CLPE, CFWE

Crime Scene Unit Supervisor, Charlotte County Sheriff's Office, Punta Gorda, Florida

Have you considered becoming a footwear examiner? Whether you are new to the field of forensics or you are an experienced expert in another discipline, this workshop will help you get started on a course toward being a footwear evidence expert. If you are brand new to forensics this is an interesting and challenging first discipline. If you have training in another discipline such as latent prints, firearms or crime scenes, you already have skills and methods that can be applied to the examination of footwear evidence. This workshop will introduce the principles of examining footwear impressions by discussing the characteristics of shoes that are compared, by outlining the comparison process and by working sample cases. This workshop will also cover the additional training and experience recommended before conducting casework, and the resources that are helpful toward this goal. This is the most overlooked evidence at crime scenes! There is a ton of potential evidence out there that needs more experts to encourage collection and to work the cases – come find out how to make it happen for you!

This workshop will not be offered again.

TPI

7:00am-5:00pm

W58 \$30 Basic Training

Moot Court for the Tenprint Examiner

Michael Gorden, CTPE

Supervisory Fingerprint Examiner, Federal Bureau of Investigations, Clarksburg, West Virginia

Kevin Burke, CTPE, CLPE, CSCSA

Police Officer (retired) Andover Police Department, Massachusetts

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.

This workshop will not be offered again.

LPI

8:00am-10:00am

W28 \$30 Intermediate Training

Crease and Third Level Ridge Details Workshop

John R. Vanderkolk

Laboratory Manager, Indiana State Police Laboratory, Fort Wayne

Natural patterns are unique, including the patterns of textures and pores on ridges, and creases in friction skin. As long as the source of the impressions is persistent between the depositions at the scene and later when standards are obtained, impressions can be examined to determine whether they share common origin. By examining the sequences and configurations of the details of features of the skin, the source of the questioned impression can be determined if sufficient quality and quantity of details are present in both images. This workshop will include a discussion of unique natural patterns, the examination process, and then practical exercises emphasizing crease and third level ridge details examinations. Previous experience in any comparative science is beneficial for the student.

This workshop will also be offered as W44 following this workshop from 1:00pm-3:00pm.

LPD

8:00am-10:00am

W54 \$30 Basic Training

Developing Latent Prints on Firearms, Cartridges and Spent Cartridge Cases... Does Anything Really Work?

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

This workshop is also offered as W53 on Tuesday from 1:00pm-3:00pm. The learning objectives are provided under W53.

GFF

8:00am-11:00am

W41 \$35 Basic Training

Is It Human? Distinguishing Human from Non-Human Skeletal Remains

Dr. Tammy Barette, CSCSA

Training Specialist, Houston Forensic Science Center, Texas

Skeletal remains are frequently encountered in a variety of forensic contexts. It is crucial that human remains be distinguished from non-human remains early in the investigative process to reduce wasted time, expense, and manpower. Our ability to recognize the structural and developmental patterns of the skeleton and to utilize those patterns enables us in distinguishing human from non-human remains. In many forensic contexts, identification of skeletal remains as non-human is the final determination precluding lengthy and unnecessary death investigation processes.

This workshop is designed for investigators who may encounter skeletal remains in the course of their duties. It is designed to assist participants with field recognition of skeletal remains of various species that may commonly be encountered in North American forensic contexts, and to be able to distinguish them from human skeletal remains. This workshop will not make the participant an expert in skeletal identification and should not be substituted for the expertise of a trained osteologist or forensic anthropologist. Attendees need not have previous training in skeletal remains. **This workshop is also offered as W96 following this workshop from 1:00pm-4:00pm.**

PEI

8:00am-11:00am

W60 \$30 Intermediate Training

Identification and Photography of Bioluminescent Evidence

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

This workshop is a lecture, demonstration and hands on activity of bioluminescent processing of blood at the Crime Scene. In past years, bioluminescent processing has been a problem due to chemical mixing procedures, improper mixing and problems in interpretation of the bioluminescent reaction. Thanks to this new technology, we will be using pre-packaged kits, additional types of chemical and products for the bioluminescent reaction. A demonstration will be conducted with focus on testing for possible bloodstains; areas to be processed and special photographic techniques to capture the bioluminescent chemical reaction. **This workshop will not be offered again.**

LPI

8:00am-11:00am

W66 \$30 Intermediate Training

What if I Don't Agree? Conflict Resolution in Latent Print Comparison

Heather Conner, CLPE

Latent Print Examiner III, Technical Lead, Mesa Police Department, Arizona

Penny J. Dechant, CLPE

Criminalist, Technical Lead, Arizona Department of Public Safety, Phoenix, Arizona

Do examiners disagree? 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? It is imperative that Latent Print Units have clearly defined procedures to document the conflict resolution process. This presentation will address different conflict resolution processes adopted by two Arizona agencies. Discussion of the pros and cons of these procedures will be held. Workshop participants will draft procedures for conflict resolution. Actual latent prints that have resulted in disagreement or which have gone through a conflict resolution process will be examined. **This workshop will not be offered again.**

CSA

8:00am-11:00am

W80 \$30 Basic Training

Trajectory of Vehicles: Rods, Strings and Lasers

Jan Johnson, CSCSA

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

Andrew Taravella, CSCSA, CFPH

Senior Police Officer, Houston Forensic Science Center, Texas

This workshop is also offered as W79 on Monday from 6:00pm-10:00pm. The learning objectives are listed under W79.

BPA

8:00am-11:00am

W86 \$30 Intermediate Training

Applying Bloodstain Pattern Analysis Methodology to Casework

Holly Latham, CBPA, CLPE

Forensic Scientist III, Kansas Bureau of Investigation, Great Bend

A bloodstain pattern analyst approaches a crime scene, and after careful consideration of the evidence, formulates a mechanism by which the stains were created in order to provide a reconstruction or sequencing of events. It is the duty of the analyst to be able to articulate how they analyzed the scene and arrived at their conclusions. Most analysts use the scientific method without being consciously aware of it. They make observations either at the scene or through photographs, formulate theories as to what happened, and then test those theories to draw conclusions. Most experts reach accurate conclusions but cannot articulate how they reached the conclusion or the methodology that they utilized. It is imperative that analysts not only understand the scientific method but learn how to apply it to bloodstain pattern analysis. Attendees will be introduced to reasoning and the scientific method. Practical exercises will be given to provide examples of how the scientific method is applied to bloodstain pattern analysis. This is an intermediate level workshop and requires that attendees have a basic knowledge of bloodstain pattern analysis. **This workshop will not be offered again.**

DEE

8:00am-4:00pm

W89 \$30 Basic Training

Basic Reverse Projection Photogrammetry

Walter E. Bruehs

Supervisory Forensic Image Examiner, Federal Bureau of Investigations, Quantico, Virginia

Christopher W. Iber

Forensic Image Examiner, Federal Bureau of Investigations, Quantico, Virginia

This basic hands-on workshop will cover the principles behind the reverse projection techniques of forensic photogrammetry. It will include a brief introduction, a step-by-step procedure and will describe and demonstrate equipment needed. This workshop will address questioned imagery acquired from analog and digital sources. A fabricated submission will be provided. Attendees will be instructed on how to determine the height of the suspect by setting up the equipment, finding the original camera positions and determining the position of the height chart. Potential sources of error and uncertainty when using the technique for height determination will be discussed.

This workshop will not be offered again.

LPI

1:00pm-3:00pm

W44 \$30 Intermediate Training

Crease and Third Level Ridge Details Workshop

John R. Vanderkolk

Laboratory Manager, Indiana State Police Laboratory, Fort Wayne

This workshop is also offered as W28 prior to this workshop from 8:00am-10:00am. The learning objectives are provided under W28.

LPD

1:00pm-3:00pm

W55 \$30 Basic Training

Thermal Paper, Regular Paper ... what's the big deal?

Wade Knaap

Faculty, Forensic Science Program, University of Toronto, Mississauga, Ontario, Canada

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. Development techniques will include:

- Amino Acid reagents (DFO, Ninhydrin, Indanedione)
- Wet vs Dry Chemistry Techniques
- Hydrochloric, Nitric, Acetic Acid
- Dry Heat
- Steam
- Magnetic Powder
- Alternate Light Source

Post Processing Stain Removal Techniques:

- Chemical Bath – Rinse
- 3M Scotch Tape

This workshop will not be offered again.

FTT

1:00pm-3:00pm

W70 \$25 Basic Training

Documentation and Recovery of 2D Footwear Impression Evidence

Cole, Jason

Latent Print Examiner, Henderson Police Department, Nevada

Footwear impressions can reveal, in many cases, the type, make, design and approximate or precise size of the footwear that made them. This can be done through class and individual characteristics that are visible in the impression. The information can often assist in identifying a suspect. In addition, the location of footwear impressions at the scene can often help to reconstruct the crime. The presence, characteristics and condition of the impression can assist in determining the number of suspects involved, their path through and away from the crime scene, their involvement in the crime, and the events that occurred during the crime. Footwear impressions at crime scenes can also be used to corroborate or refute information provided by other witnesses. This hands-on workshop is designed to help the student learn the best methods for recovering 2D footwear impression evidence. The collection of exemplar prints will also be discussed and new technology/methods demonstrated.

This workshop is also offered as W71 following this workshop from 3:00pm-5:00pm.

TPI

1:00pm-3:00pm

W91 \$25 Basic Training

Unique Way of Taking Major Case Prints

Kathy Hentges, CLPE

President, KMH Forensics, Retired Forensic Science Specialist IV, Missouri Police Department, Kansas City, Missouri

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 residue 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 both ten print and latent print examiners. **This workshop will not be offered again.**

BPA

1:00pm-3:00pm

W99 \$25 Basic Training

Bloodstain Pattern Analyst Certification Preparation

Jeff Gurvis, CBPA

Forensic Scientist, Independent Contractor, Arlington Heights, Illinois

This course will provide an update as to the IAI Bloodstain Pattern Analyst Certification Program including what to expect from the test and sample questions. Attendees will participate in group discussions regarding sample questions and scenarios. **This workshop will not be offered again.**

GFF

1:00pm-4:00pm

W96 \$35 Basic Training

Is It Human? Distinguishing Human from Non-Human Skeletal Remains

Dr. Tammy Barette, CSCSA

Training Specialist, Houston Forensic Science Center, Texas

This workshop is also offered as W41 prior to this workshop from 8:00am-11:00am. The learning objectives are provided under W41.

LPI

1:00pm-5:00pm

W31 \$30 Basic Training

Fingerprint Pattern Interpretation: A lost art form?

Sandra Siegel, CLPE

Sr. Latent Print Examiner, Houston Forensic Science Center, Texas

In this day of AFIS automation, the interpretation of fingerprint patterns is becoming a lost art. Some Latent Print Examiners today and even some Ten-Print Examiners do not use all of the rules to determine fingerprint pattern types. This will also be helpful for latent print examiners preparing for the pattern interpretation portion of the IAI certification test. Or if you just miss it and want to go down memory lane. The discussion will be outlined by the 'The Science of Fingerprints' as published by the U.S. Department of Justice (Green Book). Magnifiers will not be needed. **This workshop will not be offered again.**

GFF

1:00pm-5:00pm

W49 \$60 Advanced Training

Advanced Digital Imaging Workshop

David M. Witzke

Vice President, Program Management, Foray Technologies

After completing this four-hour workshop, the class participants will have a more comprehensive working knowledge of Adobe® Photoshop® CC. In particular, the attendees will have an understanding of the advanced procedures used in forensic digital imaging, such as working with multiple layers, creating overlays and more, as well as how to apply those concepts in the documentation of the analysis, comparison, evaluation and verification processes and comply with ISO guidelines. This is a "hands-on" training program; all students will participate in a "practical application" exercises to ensure that the required learning objectives were achieved.

This workshop will not be offered again.



ART

1:00pm-5:00pm

W63 \$50 Intermediate Training

Exercises in Deciphering the Human Face

Stephen Mancusi, CFA

Forensic Artist, Retired New York Police Department, ForArtist lic,

A forensic artist requires the understanding of and ability to illustrate the human face with a high degree of skill. This workshop will explore the most fundamental question: “What makes an individual appear unique?” When analyzing an image or photograph of a human face, it is paramount to recognize that those are 2-dimensional representations of a 3-dimensional head. One must fully comprehend how light falls on the structures of the head and renders the forms of the face. A basic understanding of facial anatomy is essential. However, how that anatomy is projected outwardly and influences the subject’s appearance is equally important. Image and camera perspective plays an important role as well. This workshop will explore these concepts through presentations, visual exercises and drawing fundamentals. It will also address recognizing and interpreting unique facial proportions, characteristics, and feature value distinction. Ultimately, the student will develop a greater insight into evaluating the overall appearance of a subject. This will help to evaluate and/or draw subjects from photographs, various facial references, and witness descriptions. All necessary materials will be provided.

This workshop will not be offered again.

FTT

3:00pm-5:00pm

W71 \$25 Basic Training

Documentation and Recovery of 2D Footwear Impression Evidence

Cole, Jason

Latent Print Examiner, Henderson Police Department, Nevada

This workshop is also offered as W70 prior to this workshop from 1:00pm-3:00pm. The learning objectives are listed under W70.



FTT-21

8:00am-8:25am

Maximizing the Recovery of Footwear Evidence through Sequential Processing

Michael Gorn, CCSI

Director of Forensic Services, Sarasota County Sheriff's Office, Sarasota, Florida

Crime scene investigators are often required to recover footwear impressions which may have been made from either dry residue, wet outsoles or in blood. In order to test whether impressions from all three of these deposits could be recovered, research was conducted using physical (electrostatic lifting, aluminum powder/black gelatin lift) and chemical (luminol and leuco-crystal violet) techniques in sequence. Light colored flooring was used since this is commonly encountered at crime scenes. Presumptive and confirmatory tests for blood were done on any enhanced impressions in order to make sure that positive results could be obtained post-processing. Using these techniques in a sequential manner allowed for the maximum amount of footwear evidence to be recovered, without having to focus on only one type such as those made in blood. This could be crucial where two offenders were involved but only one stepped in a wet source of blood.

BIS-10

8:00am-8:55am

Expanding the IAI to Focus on Digital Evidence

Moderator: B. Scott Swann

Senior Director of Innovation, MorphoTrak & IAI Biometric Identification Services
Committee Chair

Panel: Richard Vorder Bruegge

Senior Photo Technologist, Federal Bureau of Investigation, Quantico, Virginia

Raffie Beroukhim

VP and General Manager of Biometrics Solutions Division, NEC Corporation of America

Rick Lautenbach

Cyber Security Representative/Target

The first objective set forth in the IAI Certificate of Incorporation specifically describes the necessity to associate experts of forensic identification, investigation, and scientific examination of 'physical' evidence in an organized body so that the profession, and all of its branches, may be standardized and effectively scientifically practiced. The subsequent objectives of this Constitution however do not limit the focus area to 'physical' evidence and encourage the IAI to evolve with the latest techniques and discoveries in forensic identification and crime detection. Law enforcement agencies today are challenged with daunting volumes of digital evidence impacting a majority of their cases none the less the increasing volumes of cyber threats to our US infrastructure. Integrating collection and analysis of digital evidence into the criminal justice enterprise requires extensive training and constantly evolving standards and proficiency. This panel will explore whether the IAI should expand to embrace digital evidence as a new focus area of its participation; what other efforts are underway to address these challenges; and what the success criteria for successfully adopting digital evidence should look like in the years to come.

LPD-07

8:00am-8:55am

A Review of Recent Published Fingerprint Research Papers

Robert Ramotowski

Chief Forensic Chemist, U. S. Secret Service, Washington, D.C.

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).

ART-01

8:00am-10:00am

Through the Eyes of a Child: The Cognitive Graphic Interview for a Composite Sketch

Traci E. Schinnerer-Harrell, CFA

Detective/Forensic Artist (retired), Quitman, Georgia

This lecture is a case presentation demonstrating how a forensic artist can utilize techniques of the child cognitive and graphic interviewing methods to obtain a successful composite sketch.

FTT-06

8:30am-9:25am

Tread Pattern Development

Joseph G. Dancy

Chief Tire Analysis Engineer, The Goodyear Tire & Rubber Company, Akron, Ohio

Tire tread patterns are developed to meet government, regulatory, and tire performance requirements. We will discuss tire sizing, tire noise, tire footprints, OE vs. renewal tires, tread pattern recognition resources, and mold manufacture.

BIS-11

9:00am-9:25am

Evaluation of Multi-sensor Contactless vs. Contact Fingerprint Technologies

Dr. Jeremy Dawson

Associate Professor, West Virginia University, Morgantown

As contactless fingerprint systems become more mature, the interoperability of images collected from these systems with traditional paper-based and livescan systems is of great importance. The purpose of this effort was to obtain fingerprint data from 400 people using 8 different sensors to enable the evaluation of non-contact fingerprint devices. In addition, human factors information was collected from operators performing the data collection to assess the operability of the prototype devices and how the general public interacted with these devices. Fingerprint interoperability was evaluated using a commercial matcher, with promising results given the developmental stage of the contactless sensors selected for this study.



LPD-03

9:00am-9:25am

Suitability of Condoms as a Substrate for Latent Print Development

Jessica L. Tarry

Criminalist II, New York Police Department Police Laboratory, New York City

In this study, fresh and aged fingerprints on lubricated and non-lubricated condoms were tested using various print development methods to determine if condoms are a suitable substrate for latent print development. Since fingerprint search databases are more robust than DNA databases, it may be beneficial to analyze condoms submitted as evidence for the presence of latent prints.

FTT-11

9:30am-9:55am

Technique for Demonstrating Tire Noise Treatment Analysis

Brian McVicker

Forensic Footwear & Tire Examiner, Federal Bureau of Investigations, Quantico, Virginia

This presentation will provide instructions on creating visual aids to assist with demonstrating tire noise treatment for use in examination case records or while providing expert witness testimony.

BIS-12

9:30am-10:00am

Testing Contactless Fingerprint Devices

John M. Libert,

Project Manager, NIST, Gaithersburg, Maryland

This presentation will review the approach and status of the NIST project to develop measurements for testing contactless fingerprint capture devices.

LPI-03

9:30am-10:00am

Latent Fingerprint Image Quality

Kai Cao

Post-Doctoral Fellow, Department of Computer Science and Engineering, Michigan State University, East Lansing, Michigan

Dr. Anil K. Jain

University Distinguished Professor, Department of Computer Science and Engineering, Michigan State University, East Lansing, Michigan

In this presentation an objective quality measure for latent fingerprints is proposed. The quality measure is based on automatically extracted features from latent image that include minutiae, minutiae quality and ridge clarity. We show that the proposed LFIQ measure has a strong correlation with Rank-1 retrieval accuracy of a state of the art latent AFIS. Our latent quality measure, called LFIQ-2.0 performs better than an earlier measure, called LFIQ [Yoon et al., BTAS, 2013].

FTT-19**10:00am-10:25am****The Recovery of Tire Track Marks from the Inside of Clothing****Sarah E. Bohne, CLPE, CFWE**

Latent Fingerprint Examiner, Colorado Springs Police Department, Colorado

When a tire comes into contact with a garment being worn, it is possible for a tire mark to be made on the interior surface by means of skin cells or sweat transferring to the garment. The presence of the mark, whether visible or latent, on the interior surface of clothing is indicative of the mark being made with some degree of force while the clothing was worn. This lecture will describe the procedures for examining items that may bear these types of marks and a protocol for their enhancement / development. Case studies and results of conducted research will also be presented in which developed tire marks were compared to tires.

FTT-16**10:30am-10:55am****Size Variations Associated with the Different Methods of Recording Outsole Impressions of Reference Footwear for Comparisons****Jeremy John, CLPE, CFWE**

Latent Print Examiner, DFSC- U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

Anthony Koertner, CLPE, CFWE

Research and Development Coordinator, Latent Print Examiner, DFSC- U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

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. This presentation will provide a preliminary exploration of which factors may cause the most variation as well as the extent of such variations so that footwear examiners may consider how much tolerance to allot when performing size determinations between questioned and known footwear impressions. 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.

FII-08**10:30am-11:25am****Enabling Nighttime Face Recognition: Passive Polarimetric-thermal Imaging and Cross-spectrum Matching****Dr. Shuowen "Sean" Hu**

Electronics Engineer, U.S. Army research Laboratory, Adelphi, Maryland

Dr. Nathaniel J. Short

Lead Scientist, Booz Allen Hamilton, McLean, Virginia

This presentation will discuss the application of unconventional methods for long-range face acquisition and recognition: - Exploiting polarization-state information of thermal emissions for passive human identification in variable lighting - Cross-spectrum recognition for interoperability with existing data sets - Feature learning and fusion for domain mapping - Synthesis of visible-spectrum face images from thermal and polarimetric-thermal imagery - Demonstration of cross-spectrum face recognition capability.

GFF-03 

10:30am-Noon

The Basics of Bone Trauma

Dr. Tammy Barette, CSCSA

Training Specialist, Houston Forensic Science Center, Texas

Skeletal trauma or injury analysis requires observation and interpretation of patterns resulting from a variety of transient forces recorded in the bone. Similar to bloodstain patterns, patterns of injury to the skeleton are characteristic of the forces applied to the bone and are able to be distinguished and identified. This presentation will cover sharp force, blunt force, and gunshot wound trauma in bone, allowing investigators to recognize and understand the traits of each trauma type.

ART-02

10:30am-Noon

I Had a Forensic Art Case

Suzanne Lowe Birdwell

Forensic Artist, Texas DPS / Texas Rangers, Austin, Texas

This staple of the IAI agenda is a lecture session that allows practicing Forensic Artists to make brief presentations about interesting cases for the purposes of sharing, learning and questioning. A presenter may highlight a “hit,” explain a technique, ask for guidance with a challenge, show the variety of work his/her agency offers, etc. An overview of Forensic Art genres will be represented, not solely composite drawings. This forum encourages sharing and asking questions openly. This is a perfect opportunity to hear what others have been working on, share in colleagues’ successes, or encourage them through a difficult case scenario. No recording or photos of casework will be allowed.

LPI-23

10:30am-Noon

Double Loop Podcast Panel Discussion: Latent Print Examination and Conclusions

Dr. Glen Langenburg, CLPE

Forensic Scientist Supervisor, Minnesota Bureau of Criminal Apprehension, St. Paul, Minnesota

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety, Phoenix, Arizona

Glenn Langenburg and Eric Ray host the Double Loop Podcast, a weekly podcast on latent print topics. This year they host a panel discussion on some of the latest concepts in describing the examination process and resulting conclusions. How are terms like individualization, identification, association, probability, and strength of evidence used in labs across the country? What are the benefits and downsides to reporting conclusions traditionally or by using more probabilistic terms? How should suitability and sufficiency decisions be expressed in court? What questions do you have on recent changes that some agencies have made in these areas? Come see the magic behind the most popular latent print podcast in the world.

FTT-04

11:00am-Noon

The Significance of Footwear Examinations and Conclusions in a Major Case Management Module

John Norman, CFWE

Senior Forensic Analyst, Ontario Provincial Police, Orillia, Canada

The presentation includes three homicide cases which have been dealt with in the Superior Court of Justice.

GFF-25

11:30am-Noon

Current and Future Applications of DNA Technologies in Forensic Science

Dr. Joshua Suhl

Lead Scientist, Booz Allen Hamilton, Westborough, Massachusetts

This presentation will cover the current state of forensic DNA analysis, shortcomings in current practices, and potential solutions to several of these challenges through the use of emerging DNA analysis technologies.

BIS-13

1:00pm-1:25pm

Use of Speaker Identification in Forensics Worldwide

Anastasia Pavlovic

Director of Sales Engineering, Agnitio Corporation, Arlington, Virginia

Explain the Use of Speaker Identification in courts worldwide: an overview on the state of automated speaker identification technology, how it is used in forensic labs to support testimony, strengths and weaknesses of its application in today's forensic landscape, variations on pertinent evidentiary law from country to country, life cycle of an example Speaker ID case from data source to courtroom.

LPI-18

1:00pm-1:25pm

Evaluation of a Statistical Model to Quantify the Weight of Fingerprint Evidence

Henry Swofford, CLPE, CFWE

Chief, Latent Print Branch, DFSC-U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

The potential for fingerprint evidence to provide value in the criminal justice system is generally undisputed. Although once considered the gold standard, over the last decade fingerprint evidence has been the focal point of significant scrutiny, criticism, and calls for reform by legal and scientific critics and commentators. At the core of many of these criticisms is the inability for the fingerprint community to measure the correspondence between two fingerprint impressions and estimate the related likelihoods necessary to quantify the weight of the evidence. Having such capability not only adds an additional layer of quality assurance to the analyst's subjective interpretation of correspondence and answers the calls for reform thereby strengthening the underlying foundation of fingerprint evidence, but it also opens the door for a far greater amount of evidence to be considered by investigators and legal fact-finders. This is because the results may be expressed on a continuum rather than limited to situations where there is overwhelming amount of correspondence to justify a single-source attribution, which is the case under the traditional paradigm of absolute categorical conclusions. This presentation will introduce attendees to a prototype statistical model developed by the United States Army Criminal Investigation Laboratory designed to measure the correspondence between two fingerprint impressions and estimate the likelihood they originated from the same source rather than different sources, present the results of ongoing evaluation and validation efforts, and discuss current efforts to transition this technology into practice. 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.

GFF-19

1:00pm-1:55pm

Off The Shelf Crime Scene Processing

Brian P. Cochran

Detective, Boone County Sheriff's Department, Burlington, Kentucky

Timothy S. Schade, CLPE

Sr. Evidence Technician, Knoxville Police Department, Tennessee

This presentation will cover numerous ways in which to utilize off the shelf items from big box type stores to process crime scenes. We often are drawn in to concept in the field of crime scene processing that the only way effectively process a scene is to have a huge budget and tons of equipment from specific suppliers. Many agencies do not have the budget or maybe caught without equipment in the field and be forced to source supplies locally. The concepts that will be cover are improvised shooting scene equipment, alternate latent print development techniques, DIY alternate light sources, and many more.

ART-03



1:00pm-1:55pm

The Unidentified Victims of Gilgo Beach: A Forensic Artists Perspective

Danielle M. Gruttadaurio

Forensic Artist, Suffolk County Police Department, Yaphank, New York

This lecture will focus on a forensic artist's perceptive and the forensic craniofacial reconstructions of the unidentified victims from the Long Island Gilgo Beach serial killer.

FTT-05

1:00pm-1:55pm

Examination and Comparison of Footwear Impressions on Skin

Lesley Hammer, CFWE

Forensic Consultant, Hammer Forensics, Anchorage, Alaska

Footwear impressions may be left on skin as a result of injury and/or through the transfer of a substance from an outsole to the skin. Examination of these types of impressions considers many variables including the flexibility of skin, the contoured surface of the human body, the limitations of collection methods and the type of detail expected from injury impressions. This presentation will include examples of cases involving footwear impressions on skin, discuss the considerations for examination based on experience and other published and presented research.



LPI-08

1:30pm-1:55pm

The Suitability Spectrum in Latent Prints

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

Suitability is widely considered a binary decision – value or no value. But marks may be more or less suitable for multiple applications including comparison, AFIS, and identification. Probabilistic conclusions are introducing additional shades of grey. Levels of complexity may also dictate QA measures or specific uses for which marks are suitable. This lecture explores nuances of the suitability decision.

GFF-06

2:00pm-2:30pm

Forensic Standards Development

Bradford Wing

Secretariat, American Academy of Forensic Sciences

The American Academy of Forensic Sciences has established a Standards Development Organization, called the Academy Standards Board. The purpose is to generate standards, technical reports and best practice guidelines for the forensics community. It will work closely with the Organization of Scientific Area Committees and is not restricted to any specific forensic discipline. The Academy Standards Board hopes to work closely with organizations in forensics, such as the IAI. Mr. Wing will describe this new organization and how it will operate.

LPI-24

2:00pm-2:30pm

Latent Interoperability - A Simple Field Proven Approach

Dr. Behnam Bavarian

Principal Consultant, AFIS and Biometrics Consulting Inc., Newport Beach, California

This lecture covers the details of a simplified approach to implementing latent searches for both fingerprints and palm prints between any two agencies' AFIS. The approach is fully standard based and will not require re-encoding of the latent print across different vendor AFIS suppliers and will not require the increase in matching capacity. To show the viability and practicality of the approach, we will present an overview of the implementation of the approach for 12 agencies.

FTT-08

2:00pm-2:55pm

Training to Competence in Footwear Examination: A Model for Long Distance Mentorship

Lesley Hammer, CFWE

Hammer Forensics, Anchorage Alaska - Lesley Hammer is a Forensic Examiner from Anchorage Alaska

Heather Jenner, CLPE and Kaitlin Moe, CLPE

Forensic Scientists, Montana Department of Justice, Missoula, Montana

Many agencies lack expertise in the area of footwear examination, and without the benefit of trained footwear examiners on site must look for ways to provide training, mentorship and review of casework. The Montana State Crime Laboratory entered into a project with a Certified Footwear Examiner located in Alaska with the goal of training two latent print examiners to conduct Footwear Examinations. With all involved feeling that this endeavor was a great success, both the Mentor and the New Examiners would like to share this model, the successes, challenges and lessons learned as this or a similar model may prove to be a way forward for other mentors and trainees in the future.

DEE-05



2:00pm-3:00pm

Digital Evidence 2016, Fitbit, the Cloud, and a Little Robot

Jerry W. Hoover

Cybersecurity Professor, Allegany College of Maryland

When you enter a crime scene today do you even know what digital evidence is available? The past year has introduced a load of new gadgets that are available to the Digital Examiner, but only if the crime scene tech recognizes them and brings them in. So let's spend an hour talking about the cloud, the robot, and the thing on your wrist that tells you that you're lazy.

FTT-15

3:00pm-3:25pm

Documentation of Footwear Comparisons in the Era of Digital Casework

Jeremy John, CLPE, CFWE

Latent Print Examiner, DFSC- U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

Anthony Koertner, CLPE, CFWE

Research and Development Coordinator, Latent Print Examiner, DFSC- U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

Since the 2009 NAS report, a call for more thorough, complete, and transparent documentation has been stressed across the forensic disciplines. In conjunction with this call for increased documentation, many laboratories have shifted a majority of their case records to paperless/digital formats. This proposes a challenge to those disciplines such as Footwear Examinations that use visual media for the basis of their conclusions. This is especially challenging when attempting to digitally document your Analysis, Comparison, Evaluation, and Verification (ACE-V) process for footwear evidence. While the general digital documentation in footwear case notes has notably increased, the digital documentation of the footwear ACE-V process is still in its early stages. In an attempt to increase the overall quality and transparency of the process, the topic of what and how to possibly document the footwear ACE-V process in a digital format in an easy and efficient, yet thorough manner will be broached. This is done in an effort to help Footwear Examiners communicate and document the rational thought process which lead to their decisions. 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.

GFF-13

3:00pm-3:55pm

Faces on the Wall: Problems and pitfalls encountered with biological profiles and facial images

Dr. Emily Craig

Forensic Anthropologist, University of N. Texas Health Science Center, Ft. Worth, Texas

This presentation will show a number of specific case examples where personal bias and perhaps small errors in the initial biological profile can become an issue when creating facial images and searching missing/unidentified person databases.

LPI-06



3:00pm-3:55pm

Welcome to Latent Land

Mack Brazelle, CLPE, CCSI

Fingerprint Specialist, Treasury Inspector General for Tax Administration, Beltsville, Maryland

More than 100 years ago some very smart people figured out how to classify fingerprints. The Henry Classification System, and others like it, solved the problem of searching the growing fingerprint collections of the world. From that point forward, pattern types have dominated the way latent print examiners think, speak and work despite the fact that it had little to do with analyzing latent prints. Find out why this antiquated system is no longer applicable to the modern latent print examiner. There is a better more intuitive way. Attend this lecture and make the switch from the world of tenprint to “Latent Land”.

FTT-13

3:30pm-4:25pm

A Look at Close Non-Match Footwear Examinations

Matthew J. Marvin, CLPE, CFWE

Technical Manager/Senior Consultant, Ron Smith and Associates, Inc., Collinsville, Mississippi

This lecture will discuss ongoing footwear research at Ron Smith and Associates, Inc. The research involves the inter-comparison of 34 pairs of New Balance 878 shoes that were worn by the same person, running the same distance, on the same type of surface, with ground truth information. This portion of the research focuses on close non-match footwear utilizing these shoes. This presentation will cover information presented in 2015 and updates to the continued research.

GFF-17

3:30pm-5:00pm

Panel Discussion: What Constitutes an Effective and Appropriate Forensic Report?

Jessica Gabel Cino

Associate Professor of Law, Associate Dean of Academic Affairs, Georgia State University College of Law, Atlanta, Georgia

Lesley Hammer, CFWE

Forensic Consultant, Hammer Forensics, Anchorage Alaska

Henry Swofford, CLPE, CFWE

Chief, Latent Print Branch, DFSC- U.S. Army Criminal Investigation Laboratory, Forest Park, Georgia

Forensic science laboratory reports serve as essential tools to the criminal justice system and are the key elements by which the value of forensic evidence is communicated to factfinders. Over the last several years there has been growing debate on how results of laboratory examinations should be reported and articulated to ensure that judges and lawyers understand the analysis and permit informed, unbiased scrutiny of the conclusions. Although general guidelines have been established, many laboratories do not meet this standard of reporting. This panel will explore a variety of different perspectives representing a cross-section of the criminal justice system and discuss the challenges, requirements and goals of writing professional forensic science reports. 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.

GFF-22
4:00pm-4:25pm



Perceptions of the CSI - Effect by New York State Prosecutors and Forensic Science Requests at Trial

Dr. Elizabeth Brown

Associate Professor, SUNY Canton, Canton, New York

This presentation will cover the perception of the CSI-effect by NYS prosecutors based on increased requests for forensic evidence processing and/or increased requests for forensic expert witnesses at trial. The study was broken down into 3 forensic science categories: DNA, fingerprints and trace, however, the general results of increases in forensic science requests at trial will be presented.

LPD-06
4:00pm-4:25pm

ENFSI Fingerprint Best Practice Manual

Dr. Aldo Mattei

Major of Carabinieri Force, Laboratory Deputy Director, Head of the Latent Print Unit, Carabinieri Scientific Investigation Service, Messina, South Italy

The Fingerprint Best Practice Manual (BPM) was revised with a biannual funding programme by the European Commission (MP2012). The BPM provide guidance on standards, quality principles and approaches for forensic fingerprint examinations. These principles will meet the requirements of ISO17025. By following this best practice manual laboratories of ENFSI and other forensic organizations may establish and maintain fingerprint examination facilities and working practices capable to present to judicial systems reliable and reproducible results. The BPM will be presented in its contents chapter by chapter and electronic copies of the manual will be available for the attendees.

GFF-18
4:30pm-5:00pm

Unusual, Genius and Stupid Tactics for More Fingerprint and Face Identifications

Ed German, CLPE

Forensic Lead, Macon County Sheriff's Office, Decatur, Illinois

Thoroughness, accuracy and timeliness – pick two. That is the unfortunate reality of resource constraints in many organizations/laboratories in the friction ridge and face disciplines. Some experts/offices/organizations have devised novel ways to achieve greater overall success (working smarter, not harder). This presentation discusses a variety of evidence harvesting, workflow, and automated system tactics (policies and practices) observed by the speaker during four decades of employment on three continents, including frequent interface with experts on six continents.

FTT-12
4:30pm-5:00pm

The Legacy of R v T Court Ruling in the UK Five Years on...

Pádraig T. O'Shea

Forensic Scientist, Cellmark Forensic Services, United Kingdom

This lecture will look at how footwear mark examinations have changed in the UK since the R v T ruling was introduced. It will look at the effect of the ruling on interpretation of footwear mark evidence, evidential strength and the court process for forensic scientists. What is the future of footwear mark evidence in the UK and how could this impinge on other areas of evidence?

LPD-02



4:30pm-5:00pm

Give up the Dark Side for the Light Side of the Force ... or How Forensic Light Sources Could Revolutionize your Laboratory SOP's

Alexandre Beaudion

Specialist en Sciences Physiques, Surete du Quebec, Montreal, Canada

This lecture will present the results of a comprehensive operational review of fingerprint forensic light sources search previous to chemical treatments over a period of one year. The results will convince you to give up the dark side for the light side of the Force...

TPI

8:00am-5:00pm

Tenprint Certification Testing

Tenprint certification testing will be held on Thursday, August 11th, beginning promptly 8:00am. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at <http://theiai.org/certifications/tenprint/index.php>

LPI

8:00am-5:00pm

Latent Print Certification Testing

Latent Print certification testing will be held on Thursday, 11th, beginning promptly at 8:00am. Only those applicants approved prior to the conference will be permitted to take the test on their assigned day. Information concerning the procedures for application can be found at <http://theiai.org/certifications/tenprint/index.php>

BPA

1:00pm-5:00pm

Bloodstain Certification Testing

Bloodstain certification testing will be held on Thursday, August 11th, beginning promptly at 1:00pm. Only those applicants approved prior to the conference will be permitted to take the test. Information concerning the procedures for application can be found at <http://theiai.org/certifications/tenprint/index.php>



PEI

7:30am-9:30am

W11 \$30 Basic Training

A Basic Latent Print Image Enhancement Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

Basic Latent Print Processing Workshop. The student must know how to copy and rename files in windows. The student must know how to open and save files in Adobe Photoshop. This workshop covers a basic latent print processing workflow starting from enhancing the camera image to scaling the image to 1X and labeling the individual photographs. Finally the images will be formatted for AFIS entry and the creation of MD5 hash values for archiving purposes. Each student will be provided a DVD with the original files used in this workshop and instructions covering the processing steps. **This workshop will not be offered again.**

PEI

8:00am-10:00am

W6 \$25 Basic Training

Technical Evidence Photography

King C. Brown, CLPE, CFP, CSCSA

Crime Scene Supervisor, West Palm Beach Police Department, Florida

M. Dawn Watkins, CLPE, CFP, CSCSA

Crime Scene Investigator/Senior Latent Fingerprint Examiner, Palm Beach Gardens Police Department, Florida

Owen M. McDonnell Jr., CLPE, CSCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Parish Sheriff's Office, Shreveport, Louisiana

The ability to produce high quality forensic images is one of the fundamentals of forensic photography. The class will delve into the aspects of framing, composition, close-up, macro, scaling, impressions, depth of field and exposures of measurable items of forensic evidence. Student's will use a hands on approach and photograph actual items of evidence. Students must bring the following: Equipment Requirements:

- Digital Camera
- Close-up lens
- Electronic flash
- Flash extension cord
- Memory Cards
- Tripod
- Cable Release

This workshop will not be offered again.



LPI

8:00am-10:00am

W16 \$35 Intermediate Training

Improving Gray Scale Perception of Latent Print Details

Dr. Thomas Busey

Professor, Indiana University, Bloomington

John Vanderkolk

Laboratory Manager, Indiana State Police, Ft. Wayne

The core competencies of latent print examiners are their abilities to perceive friction ridge detail in a degraded or noisy print. This skill- seeing grayscale- can be improved with appropriate training. In this workshop, participants will work through a series of calibrated exercises that are designed to improve the ability to see through the noise. The essential element is immediate and direct feedback on the exact nature of the ridges in noise. This feedback is unavailable in other domains, even when the ground truth is known. Participants will complete a number of training examples during the workshop, and then have the option to continue training after the workshop has concluded using a custom online application that provides confidential individualized training and feedback.

This workshop is also offered as W17 following this workshop from 1030am-12:30am.

BPA

8:00am-10:00am

W98 \$25 Basic Training

Swipe, Wipes and Transfer Impressions

Jeff Gurvis, CBPA

Forensic Scientist, Independent Contractor, Arlington Heights, Illinois

Swipes, wipes and transfer patterns are among the most common bloodstain patterns found at crime scenes. This workshop will delve into the characteristics of each of these and what information they might provide. Directionality, sources, and documentation of these patterns will be discussed. **This workshop will not be offered again.**

FPP

8:00am-11:00am

W42 \$30 Basic Training

Introduction to the Human Foot in Forensic Evaluation: Foot structure, function and barefoot analysis

Dr. David Agoada

Podiatrist, Waltham, Massachusetts

Dr. Steven Wachter

Podiatrist, New Ulm Medical Center, Minnesota

Knowledge of the human foot is an important part of interpreting pedal evidence in crime scene investigation. Barefoot prints have characteristics that can assist in the identification of an unknown individual. Forensic gait analysis necessitates an understanding of foot biomechanics. Basic information on the structure and function of the human foot, including a discussion of the gait cycle, will be presented in this course. Discussion will include features found in barefoot prints that are useful in the identification process when dermal ridge patterns are not discernible. Participants will study the relationship between barefoot prints and the foot that created them using their own feet. Each participant will have static barefoot prints taken using the LE-25 Inkless Foot-Shoe print kit, and a brief foot examination to compare with their barefoot prints. Participants will be guided through the assessment of static and dynamic barefoot prints from a podiatric perspective.

This workshop will provide valuable insight in understanding how information provided by barefoot prints can be used as part of a criminal investigation. It will also be helpful to those who plan on taking the forensic gait workshops and do not have a background in foot biomechanics. **This workshop will not be offered again.**

BPA

8:00am-11:00am

W84 \$30 Basic Training

Fluid Dynamics as it Relates to Dripping Blood

Jan Johnson, CSCSA

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

This workshop is also offered as W83 on Tuesday from 8:00am-11:00am. The learning objectives are provided under W83.

LPI

8:00am-Noon

W35 \$40 Intermediate Training

Latent Print Testimony: How to be Transparent without Feeling Naked

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

This workshop is also offered as W34 on Monday from Noon-4:00pm. The learning objectives are listed under W34.

LPI

8:00am-Noon

W43 \$40 Intermediate Training

Compare Smart

Monique Brillhart

Physical Scientist/Forensic Examiner, Federal Bureau of Investigation Laboratory, Quantico, Virginia

Effectively approaching analysis, comparison and evaluation in a methodical and thorough approach can greatly reduce fatigue and enhance confident expertise. Understanding trends in the appearance of latent prints after development, type of fingerprint pattern, and frequency and location of minutiae, can narrow down the searching approach of latent to known print comparisons. This workshop encompasses how to effectively approach analysis, comparison and evaluation in a methodical and thorough approach. Attendees will be provided with tips on how to efficiently analyze and compare latent prints using a variety of fingerprint trends, with both the naked eye and magnification. Participants will perform the ACE methodology using latent and known prints in a series of discussion exercises. At the conclusion of this workshop, the instructor anticipates that participants will have the mental tools to feel more confident in their compare smart tactics. **This workshop will not be offered again.**



CSA

8:00am-Noon

W56 \$40 Basic Training

Screening for Biological Fluids

Angela Cacioppo

Field Application Specialist, LGC

Allyce McWhorter

Field Application Specialist, Foster and Freeman

An important part of crime scene investigation is the ability to locate and recognize evidence at the scene. Alternate light sources are tools that allow examiners to locate and process otherwise invisible evidence (fingerprint evidence, trace evidence – hairs, fibers, gunshot residue, and body fluids, and bodily injuries). In addition, biological fluids typically require additional presumptive tests to be completed before submitting for STR analysis. In this workshop, we will discuss alternate light source examination as the first stage of the screening process followed by an innovative way to profile, screen and/or triage biological samples before STR analysis. This workshop will cover the basics of light theory and how light can be used to help find and visualize evidence, provide a clear understanding on how these devices work to allow examiners to properly use them, as well as, demonstrate if a sample is consistent with a reference sample utilizing a local database and it's search and compare functions, thus allowing one to triage samples more effectively. This workshop is designed for crime scene technicians, DNA serologists, trace lab personnel and anyone else associated with biological screening of evidence. Handouts will be provided and practical exercises will be conducted. **This workshop is limited to only 12 students and will not be offered again.**

BIS

8:00am-Noon

W64 \$30 Basic Training

Understanding the FBI's Identity History Summary

Edna M. Hursey

Training Instructor, Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Division, Clarksburg, West Virginia

This course provides an understanding of the FBI Identity History Summary (IdHS) generated as a result of an NGI search. Topics covered include the fields, codes, and abbreviations the FBI uses to enter data. Additionally, the course emphasizes the importance of 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. **This workshop will not be offered again.**



GFF

8:00am-Noon

W74 \$35 Intermediate Training

Uncommon Methods for Common Forensic Evidence

Kjell Carlsson

Retired Forensic Engineer, Stockholm Police Crime Laboratory, Sweden

Jens Carlsson

Forensic Engineer, Stockholm Police Crime Laboratory, Sweden

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 conclusions made from this type of comparisons.

Shoeprints and Latent Fingerprints

We will try different lighting techniques. With projected light you will get the best contrast on a shoeprint lifted with electrostatic technique. A thin shoeprint on a piece of glass needs perhaps under light with black background (Dark Field Lighting) for the best result. A method by using projected light and a semitransparent mirror placed between the camera and the fingerprint (episcopic technique) can sometimes be the only way to get identification with so called “impossible” prints. We will show a technique of casting CNA-developed fingerprints with black Mikrosil and also the photographing process for this type of prints in reflected light. Wet Powder is for most examiners, since many years back, well known for developing fingerprint on sticky side of tape. We will show a method for developing shoeprint on non-porous surfaces by using Wet Powder.

Tool marks

We will demonstrate methods of casting tool marks, fire pin impressions, extractor and ejector and other striation from casings, using Mikrosil casting material. We will show you how to make a so called “double casting” which is necessary in the tool mark comparison process. **This workshop will not be offered again.**

PEI**8:00am-Noon****W104 \$30 Intermediate Training****Photographing with Alternate Light Source****David J. Doglietto, CSCSA**

Investigator/Forensic Specialist, Greenfield, California

Michael J. Hulihan and Ted McDonald

Senior Forensic Sciences Instructors, Federal Law Enforcement Training Centers, Brunswick, Georgia

A quality Alternate Light Source or ALS is a valuable asset to any crime scene technician's toolbox or laboratory. However, of what use is the technology if the service that it provides cannot be properly documented. Enter the era of the digital camera and its function in the crime scene or laboratory. The trick, therefore, is combining the two technologies and using them to our advantage in documenting evidence, that otherwise may have been overlooked, in a manner that will be useful in courtroom proceedings. This workshop is designed to develop and improve the skills of the crime scene or laboratory technician in the use of their camera to successfully document exactly what they see through the colored filter. The workshop is designed for intermediate students who have a working knowledge of their cameras and the ability to change camera settings. Don't forget to bring your cameras and tripods! **This workshop will not be offered again.**

GFF**8:00am-5:00pm****W73 \$50 Basic Training****Probability and Statistics for Forensic Science Applications****Dr. Hari Iyer and Dr. Steven Lund**

Mathematical Statisticians, National Institute of Standards and Technology (NIST), Gaithersburg, Maryland

This workshop will explain the role of probability and statistics for the quantification of evidence and assessments of uncertainty in the interpretation of crime scene data. Special emphasis will be given to definition, calculation, and interpretation of likelihood ratios and Bayes factors in the context of pattern impression evidence. Receiver operating characteristic curves (ROC) will be introduced and explained and their use in evaluating competing approaches will be illustrated with hands-on activities. The workshop will explain basic probability calculations, conditional probabilities, event trees, Bayes formula, and include illustrations of statistical concepts such as the effect of averaging on uncertainty and the central limit theorem. Sample size determination will be addressed. Hands-on examples and exercises will be used to reinforce the concepts discussed in the workshop. Based on availability of time, additional topics that will be covered include data types, numerical and graphical summaries of data, standard probability distribution models, t-test and chi-square tests. **This workshop will not be offered again.**



PEI

10:00am-Noon

W14 \$30 Intermediate Training

FFT Enhancement of Latent Prints Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

Minimizing Patterns with an FFT Filter. The purpose of this workshop is to provide hands-on training in the use of a freeware FFT Photoshop plug-in that was written by Alex Chirokov. This FFT is limited to the 32 bit versions of Photoshop and 8-bit images. We will be using the RGB version with a circular shaped brush. This FFT has been updated by Phil Thornton to work with the 64 bit version of Photoshop and 16-bit images. We will be using a standard circular brush in this workshop. There are star shaped brush styles that can be downloaded from the internet that are slightly more effective than a simple circular brush. Fair warning: many of the commercial products are more effective, especially when trying to separate overlapping latent prints. Each student will be provided a DVD with the original files used in this workshop and instructions covering the processing steps.

This workshop will not be offered again.

LPI

10:30am-12:30pm

W17 \$35 Intermediate Training

Improving Gray Scale Perception of Latent Print Details

Dr. Thomas Busey

Professor, Indiana University, Bloomington

John Vanderkolk

Laboratory Manager, Indiana State Police, Ft. Wayne

This workshop is also offered as W16 prior to this workshop from 8:00am-10:00am. The learning objectives are provided under W16.

LPI

12:30pm-2:30pm

W15 \$30 Intermediate Training

Latent Print Court Chart Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

Latent Print Court Chart Workshop. The purpose of this workshop is to train Latent Print Examiners and Forensic Imaging Specialists how to create a latent print court chart. 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. **This workshop will not be offered again.**

LLS**12:30pm-2:30pm****W101 \$30 Basic Training****Bridging the Generational Gap in Forensic Organizations****Martina Bison-Huckaby**

Director, Center for Executive Education, West Virginia University, West Virginia

This workshop addresses the urgent need of bridging the generational gap in forensic organizations, and provides a valuable strategic tool for any forensic laboratory during a time we are experiencing unprecedented shifting demographics in the workplace. For the first time in history, the current workforce contains four distinct generations working side by side, with a fifth generation's entrance looming in the coming years. In this workshop, forensic professionals will begin by learning about the general outlook, work ethic, view of authority as well as other qualities of each of the four generations that are currently in the workforce, as well as Generation Z, which will be a part of the workforce in the near future. This will also tie into the next lesson, which will be some of the messages that each generation has faced throughout the course of its respective lifetime. Upon learning these basic fundamentals of each generation, recognizing what are valid distinctive characteristics and what are instead stereotypes, forensic professionals will then go on to learn how they can manage all of these different perspectives and experiences and learn to maximize the strengths that this diversity brings to the organization.

This workshop will not be offered again.

BPA**12:30pm-5:00pm****W61 \$40 Intermediate Training****Examination of Bloodstains and Bloodstain Patterns on Clothing****Tom "Grif" Griffin, CBPA, CSCSA, CCSR**

Bevel, Gardner & Associates, Inc., Retired Criminal Investigator, Colorado Bureau of Investigation

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.

This workshop will not be offered again.



LPI

1:00pm-3:00pm

W100 \$30 Basic Training

The Smarter Way to Work a Case - Latent Print Searching Techniques

Kelley Counts, CLPE

Consultant, Ron Smith and Associates, Largo, Florida

Matt Marvin, CLPE

Senior Consultant / Technical Manager, Ron Smith and Associates, Collinsville Mississippi

There are how many known prints to compare in this case?!?!?!? We've all had those large cases with numerous suspects, a bag full of latent prints and they want it by yesterday! They suddenly appear when we are already snowed under with a backlog or our colleagues are on vacation. This challenging, no pressure workshop will teach you how to save time during your comparisons by searching smarter, not harder. This workshop will cover topics such as orientation clues, target groups, organizing known prints, third level detail and many other time tested tips that really work and can be used every day. Whether you are just getting started with comparisons or are a seasoned veteran, this workshop will teach you helpful techniques that will make a difference throughout your career.

This workshop will not be offered again.

BPA

1:00pm-3:30pm

W82 \$30 Basic Training

What's the Angle with this Angle: Trigonometric Double Speak?

Jan Johnson, CSCSA

Forensic Specialist, Forensic Pieces Inc., Pensacola, Florida

This workshop is also offered as W81 on Tuesday from 1:00pm-3:30pm. The learning objectives are provided under W81.

LPI

1:00pm-5:00pm

W21 \$40 Intermediate Training

Reducing Erroneous Exclusions: The Workshop!

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety Crime Laboratory, Phoenix

Penny J. Dechant, CLPE

Criminalist / Latent Print Technical Lead, Arizona Department of Public Safety Crime Laboratory, Phoenix

The exclusion decision is a fairly recent change in latent print comparisons, and the discipline is still struggling with how to handle exclusions. Erroneous exclusions are being discovered with surprising frequency in latent print units around the country. Many labs have begun to verify their exclusion decisions, and this has resulted in errors finally being noticed. Recent research into the decisions of latent print examiners show that erroneous exclusions are common and inevitable. So, what training have you had in exclusions? What is enough for an exclusion? What is your lab's standard for exclusion? Is your lab implementing any new Quality Assurance policies to address this problem?

This workshop will review the policy changes that Arizona DPS has implemented in their latent print unit to reduce erroneous exclusions. Examples of erroneous exclusions from casework will be presented along with information on circumstances that might make an erroneous exclusion more likely. Hands-on comparison exercises will demonstrate a practical approach to exclusion decisions. This class is intended for latent print examiners who routinely conduct comparisons. **This workshop is also offered as W22 on Friday from 10:30am-3:30pm.**

LPD

1:00pm-5:00pm

W23 \$40 Basic Training

Make Dealing with Photographing and Lifting Difficult Prints a Breeze

James E. Clift

Detective, Providence Police Department, Rhode Island

Scott Osborn

Senior Scientific Officer, Forensic and Data Centres, Australian Federal Police, Australia

Mark Zabinski, CLPE, CSCSA

Criminalist II, Rhode Island State Crime Laboratory, Kingston

This lecture will discuss latent print recovery issues while working in the field. Lectures will highlight surface evaluation, recovery, and preservation skills with difficult latent prints. Attendees will conduct exercises to enhance their understanding of textured and contoured surfaces by implementing useful close-up photography techniques and utilizing multiple types of lifting medias (stretchable tapes, rough lift tape, Reprocast, and Mikrosil, etc.). The presentation will also discuss various ways to utilize gel lifts to non-destructively lift latent prints from gloves and prints that have been developed with cyanoacrylate as well as latent prints developed on porous surfaces using magnetic and conventional powders. This is a hands-on workshop. We would recommend to bring your camera equipment with you to use in the workshop for hands on exercises, but it is not mandatory.

This workshop will not be offered again.

LPD

1:00pm-5:00pm

W26 \$30 Basic Training

Developing, Documenting and Lifting Latent Prints on Regular, Unusual and Textured Surfaces

Owen M. McDonnell Jr., CLPE, CCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Sheriff's Office, Shreveport, Louisiana

Cole, Jason

Latent Print Examiner, Henderson Police Department, Nevada

This hands-on class is designed to give experience to officers by using various powders and other means in developing latent prints. Techniques for documenting the location and orientation will be demonstrated. Tape and other techniques for collecting prints such as Accutrans® Extruder Gun, Wet Print®, Goo-Print Powder®, Polyethylene Tape & Diff-Lift® Tape will be demonstrated and available for use. The only way to be proficient and confident in lifting latent prints off unusual and textured surfaces is by doing it. By doing these listed techniques you will be able to lift latent prints off surfaces that a print has been developed on:

- Lifting latent prints off textured surfaces.
- Lifting stick on, grease, and dry erase markers with your prints.
- Lifting latent prints off multi-contoured surfaces.
- Techniques for using to obtain known prints from deceased persons.
- Lifting prints off wet surfaces.
- Developing and lifting latent prints off a paper towel.
- Attendees will develop a latent print on a paper towel using a magnetic applicator and black powder then lift using tape.
- Developing and lifting latent prints off a feather. Developing latent prints on the adhesive side of tape.

This workshop is also offered as W27 on Friday from 10:30am – 3:30pm.

PEI

1:00pm-5:00pm

W65 \$30 Intermediate Training

Crime Scene Photography Basics (level 2)

Robert A. Young, CFPH

Police Photographic Technician, Mesa Police Department, Arizona

This workshop builds upon the principles learned in the level 1 course. To provide law enforcement personnel with the fundamentals to photographically document a crime scene. This workshop will help those who are unsure what to photograph at a scene. While every crime scene is unique, students will work with the principles of the minimum photographs required to document the scene and evidence within it as well as some suggested camera settings. Students will take, share, and review their photographs in class. Attendees are required to bring:

- Digital SLR camera and lens
- External flash with off shoe cord
- Charged batteries for camera and flash
- Memory card(s)
- Tripod
- Optional laptop and card reader to review photos in class
- Manuals for all equipment (hard bound or pdf on laptop).

This workshop will be offered again as W102 on Friday from 10:30am-3:30pm.

DEE

1:00pm-6:00pm

W90 \$60 Intermediate Training

Forensic Image Comparison

Walter E. Bruehs

Supervisory Forensic Image Examiner, Federal Bureau of Investigations, Quantico, Virginia

Christopher W. Iber

Forensic Image Examiner, Federal Bureau of Investigations, Quantico, Virginia

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). **This workshop will not be offered again.**



PEI

3:00pm-5:00pm

W13 \$30 Intermediate Training

A Crime Scene Photography Processing Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

Crime Scene Photography Processing Workflow. The student must know how to copy and rename files in windows. The student must know how to open and save files in Adobe Photoshop. The student must know how to open a PDF document in Adobe Acrobat Reader. In this workshop each student will be provided with a set of simulated crime scene photographs to be processed. The workflow will consist of processing working copies of the files in Adobe Camera Raw within Photoshop. Once processed, index prints will be created. The individual photographs will be batch processed to format them for captioning. Captions will be added using Photo Resizer. A title page will be created in Photoshop. The output module in Bridge will then be used to create a multipage pdf document that can be written to a DVD for distribution and viewing. MD5 hash values will be created that can be used to verify that the files have been correctly archived and/or burned to a DVD. Each student will be provided a DVD with the original files used in this workshop and instructions covering the processing steps. **This workshop will not be offered again.**

LLS

3:00pm-5:00pm

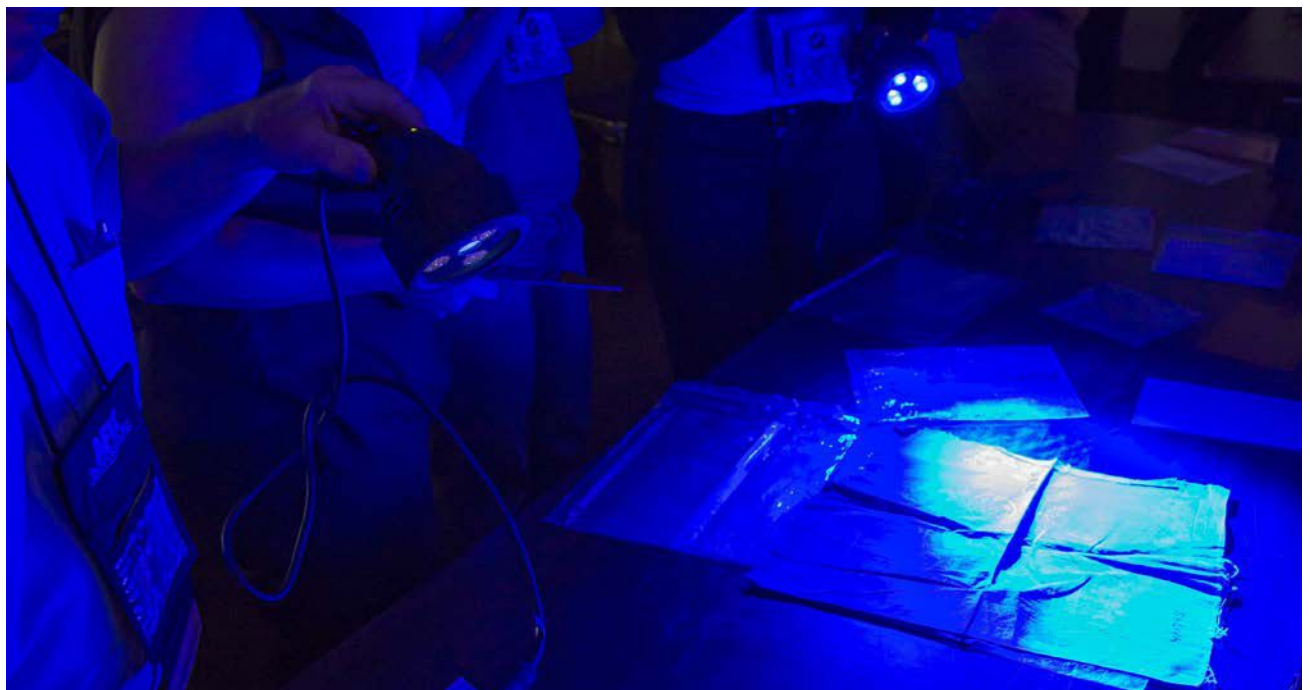
W105 \$30 Basic Training

Transitioning to a Leadership Role

Martina Bison-Huckaby

Director, Center for Executive Education, West Virginia University, West Virginia

Most forensic professionals are promoted into a leadership role without a formal transition process. During the course of their career and education, they have had the opportunity to perfect and strengthen their technical knowledge in forensic science, but oftentimes, they have not had the chance to develop the forensic management competencies that are also crucial to be successful leaders. This workshop will provide tools to increase leadership self-awareness, and help managers become better prepared for their roles. **This workshop will not be offered again.**



DEE-02



10:00am-10:55am

Forensic Video Analysis during the Boston Marathon Bombing Investigation

Kimberly A. Meline, CVE

Photographic Technologist, Federal Bureau of Investigation, Quantico, Virginia

This presentation will cover the stages of video analysis involved with the Boston Marathon Bombing investigation, including initial examination, in-depth image analysis, and how the investigation changed the way the FBI uses video evidence. *(Graphic material will be presented during this lecture.)*

FTT-02

10:00am-10:55am

Likelihood Ratios for Footwear Impressions

Simone Gittelson

Forensic Statistician, National Institute of Standards and Technology, Gaithersburg, Maryland

This presentation will cover the logical approach to the interpretation of footwear evidence. It will introduce the concept of the likelihood ratio and illustrate how a likelihood ratio can be assigned for the observations a footwear examiner makes in the comparison of footwear marks and prints. By doing this, it highlights the necessity of setting up and accessing databases of footwear marks recovered on crime scenes.

LPI-14

10:00am-10:55am

FBI Universal Latent Workstation (ULW) S.O.S.

Kimberly D. Bolyard, CTPE

Training Instructor, Federal Bureau of Investigation, Criminal Justice Information Systems, Clarksburg, West Virginia

Are you looking for Successful Outgoing Searches? This presentation is designed to explain the differences between the Next Generation Identification (NGI) search types and Image Requests as supported by the Universal Latent Workstation (ULW) Software. Recommended tips to get the best responses from the NGI will be addressed (e.g. general workflow, image names, markup, and file penetration). NGI search results, errors and the Unsolved Latent File (ULF) will be covered.



FTT-17

11:00am-11:30am

Incorporating Image Quality in Likelihood Ratios for Quantifying Weight of Footwear Evidence

Dr. Martin Herman

Senior Advisor, Information Technology Laboratory, National Institute of Standards & Technology, Gaithersburg, Maryland

Dr. Hari Iyer

Mathematical Statistician, Statistical Engineering Division, National Institute of Standards & Technology, Gaithersburg, Maryland

Dr. Yooyoung Lee

Research Scientist Contractor, National Institute of Standards & Technology, Gaithersburg, Maryland

Dr. Steven Lund

Mathematical Statistician, Statistical Engineering Division, National Institute of Standards & Technology, Gaithersburg, Maryland

Any specific Likelihood Ratio calculation has an underlying similarity measure associated with it. Conversely, given a similarity measure one can calculate an LR. When image quality/clarity of the questioned and test impressions are considered, the performance of the LR generally improves. This presentation will report experimental results to understand which quality metrics contribute to improvement of LRs, using crime scene footwear impressions and using similarity scores from a commercially available footwear matching algorithm.

LPD-09



11:00am-11:30am

Progress towards Enhancement of Latent Fingerprints on Metal Surfaces such as Cartridge Casings

David Cunningham

Professor, Eastern Kentucky University, Richmond, Kentucky

Enhancement of latent fingerprints on a variety of metal surfaces using a portable electrochemical system which deposited an intensely colored electrically conducting polymer film in the valleys of the fingermarks will be described. Results achieved in less than two minutes show excellent enhancement, including third level detail of sweat pores, on a variety of metallic surfaces (doorknobs, spoons, coffee mugs, etc) by selection of optimal polymer precursors and electrochemical conditions.

PEI-07

11:00am-Noon

Digital Video and Image Authentication

Walter E. Bruehs

Supervisory Forensic Examiner, Federal Bureau of Investigation, Quantico, Virginia

As the ease of capturing and altering digital video and imagery increases, the need to verify the content of this data is becoming increasingly difficult. This presentation is designed to highlight the state of the art and challenges faced in Forensic image and video authentication.

FTT-20

12:30pm-1:25pm

Quantifying the Chance Similarity of Randomly Acquired Characteristics in terms of Shape and Position on High Quality Footwear Exemplars

Jacqueline A. Speir

Assistant Professor, West Virginia University, Morgantown, West Virginia

This presentation will report on the coincidental association of more than 57,000 randomly acquired characteristics (RACs) obtained from 1,000 footwear exemplars. To achieve this goal, each identified RAC has been localized, categorized by shape, and mathematically compared to determine the degree of association between known non-matching accidental features, thus providing numerical estimates of the theoretical discrimination potential of forensic footwear evidence.

GFF-14

1:00pm-1:55pm

Get Outside the Box! Critical Thinking for Millennials

Carina A. Haynes, CCSI

Forensic Supervisor, Crime Scene Unit, Durham Police Department, North Carolina

Millennials are entering the field with strong book knowledge of forensics but lack the critical thinking skills to complete a thorough investigation. This presentation will cover how to teach these skills to this vastly different generation using different tools and exercises which have improved the Millennial Generation in my department and made them valuable assets to our crime scene investigation team.

DEE-03

1:00pm-2:00pm

Digital Image/Video Source Identification

Walter E. Bruhns

Supervisory Forensic Examiner, Federal Bureau of Investigation, Quantico, Virginia

This presentation is designed to provide an overview in advancements made on the FBI's FINDCAMERA tool. FINDCAMERA is technology that exploits the Photo Response Non-Uniformity to determine if sets of questioned images or a questioned video comes from a defined source or a set of images or a video. New work has been done to develop statistical parameters for the analysis of digital video. Additional work has been done to decrease the computational time and produce a tool that may become field deployable.



FTT-24

1:30pm - 2:00pm

Is it Really Great Stuff?

Lorinda Gibbs, CLPE

Forensic Scientist, Indiana State Police, Indianapolis, Indiana

This lecture will cover research regarding the use of Great Stuff Spray Foam to preserve/cast footwear impressions. The data gathered from research, as well as a detailed explanation of the method for collection will be presented.

GFF-15

1:30pm-2:45pm

Quantitative Research on the Individuality of Fingerprints

Stephen S. Wood

Mathematician, National Institute of Standards and Technology, Gaithersburg, Maryland

The acceptance of the validity, accuracy, and courtroom admissibility of fingerprint identification depends on the hypothesis that all fingerprints are unique: the individuality hypothesis. In 2015 we presented a brief discussion of a project at NIST to conduct a thorough, demanding test of that hypothesis, together with preliminary results. We now present the full results of that test. The real surprise is the extremely high confidence level in our results using operational data.

GFF-09



2:00pm-2:25pm

Can You Live with Uncertainty - Certainly

Heidi Eldridge, CLPE

Research Forensic Scientist, RTI International, North Carolina

The loss of “100% certainty” meant an admission that some uncertainty exists. But “uncertainty” is regarded with fear and hostility. As it happens, humans live with uncertainty every day and are generally really good at dealing with it. Come learn a little about what uncertainty is, why you don’t need to fear it, and where probability fits into the whole mess.

GFF-04



2:30pm-2:55pm

Learning-based Ballistic Breech Face Impression Image Matching

Xiaoming Liu

Assistant Professor, Department of Computer Science and Engineering, Michigan State University, East Lansing, Michigan

Ballistic images of a cartridge case or bullet carry distinct “fingerprints” of the firearm, which is the foundation of forensic examination. This presentation will introduce a learning-based algorithm to compute the similarity between two ballistic images with breech face impressions.

FTT-07

2:30pm-2:55pm

Construction and Application of Shoeprint Information System in China

Huanzhang Fu

Associate Professor, Institute of Forensic Science, Beijing, P. R. China

This presentation is to introduce a series of shoeprint information systems based on the modern information techniques in China, which help to promote the efficient utilization of shoeprint in the crime scene investigation. The experiences in the construction and application of these systems will also be shared.

GFF-11

2:50pm-4:00pm

The Strength of Conclusions

Michele Triplett, CLPE

Forensic Operations Manager, King County Regional AFIS, Seattle, Washington

Attempts to articulate the strength of fingerprint conclusions have persisted for decades (e.g., counting points, SWGFAST Sufficiency graph, statistical modeling, etc.). This presentation will review several past methods for determining the strength of conclusions, discuss their limitations, and present an alternative approach that is both easy and effective.

FTT-22



3:00pm-4:00pm

An Intelligence Approach to Utilizing Footwear Evidence

Michael Gorn, CCSI

Director of Forensic Services, Sarasota County Sheriff's Office, Sarasota, Florida

This panel will examine how footwear impression evidence can be used more pro-actively at the beginning stages of an investigation. Topics to be discussed will include the following:

1. Available databases for determining the make/model of an item of footwear which could have left a scene impression.
2. Scene to scene linking.
3. Collection of impressions from the footwear of arrestees.

The goal is to have vendors gain a better understanding as to the needs of the practitioner community and provide attendees with knowledge on how footwear impressions can be used as actionable intelligence.



PEI**10:30am-12:30pm****W39 \$30 Intermediate Training****Photographing Laser Trajectories in Daylight****Andrew Taravella, CFPH, CSCSA**

Senior Police Officer, Houston Forensic Science Center, Texas

Dr. Tammy Barette, CSCSA

Training Specialist, Houston Forensic Science Center, Texas

You work hard to calculate the proper angles of bullet trajectories within your scene. It involves close-up photography, precise measurements of bullet defects and calculations. I hope you do not stop there. Do you employ rods or strings to visually document those findings? Do you wish you could use lasers but do not because it is too bright outside? Many investigators believe the use of lasers is limited to nighttime or darkened environments. But, if you want to make a truly eye-catching demonstrative photograph and meet a jury or prosecutors' expectations, you would want to use lasers to depict a trajectory regardless of the lighting conditions. This workshop will show you how to use lasers at a bright scene or even outdoors in daylight employing just a few inexpensive accessories. Put away the photo-fog and the baby powder or hairspray, close the Photoshop software and learn how to capture laser trajectory photos in most any lighting environments.

This workshop is both lecture and hands-on practical. You will leave the class with the experience of taking your own laser photos with your own camera in brightly lit rooms and/or outdoor sunlight or assisting others with the same. It is not required, but attendees are encouraged to bring a DSLR with normal to wide angle lens and tripod. Other accessories that prove helpful include neutral density filters to fit your lens and cable release. For safety reasons, please do not bring your own laser, lasers will be provided by instructors.

This workshop is also offered as W40 following this workshop from 1:30pm-3:30pm.

BPA**10:30am-12:30pm****W62 \$30 Basic Training****Recognizing Voids and How to Use Them in Bloodstain Pattern Analysis****Tom "Grif" Griffin, CBPA, CSCSA, CCSR**

Bevel, Gardner & Associates, Inc., Retired Criminal Investigator, Colorado Bureau of Investigation

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. **This workshop will not be offered again.**

TPI**10:30am-12:30pm****W72 \$25 Basic Training****Scientific Basics of Palm Prints Recording****Michele T. Douglass, CTPE**

Training Instructor, Federal Bureau of Investigation/Criminal Justice Information Services Division, Clarksburg, West Virginia

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.

This workshop will not be offered again.

PEI

10:30am-3:30pm

W12 \$45 Intermediate Training

Intermediate Image Enhancement in Photoshop Workshop

Robert C. Sanders

Forensic Imaging Technical Unit Leader (retired), Wisconsin State Crime Laboratory, Wausau

This workshop will cover basic camera and flash photography skills. Last year it was observed that many attendees did not know basic photographic skills. The workshop was designed to solve this problem. The workshop will begin with a short 15 minute lecture on digital camera settings, flash operation and the use of a tripod. Following the lecture each student will be assisted as needed. Once all the students know how to use their equipment they will photograph several exercises which will include: depth of field (close-up, intermediate range and distance), simulated latent prints, simulated footwear impressions, overall photograph of a weapon, black box with one weapon outside of the box and one weapon inside of the box (available light, flash on camera and off camera flash) and if available overall photographs of a small room. Students can work in pairs as long as each person photographs each assignment. When each student is finished an instructor will review their photographs in camera. Each student must bring their DSLR, a tripod, electronic flash, cable release and flash extension cable. A limited number of tripods, flashes, cable releases and flash extension cables will be available for loan during the workshop. A one hour lunch break is included in the allotted time for W12. **This workshop will not be offered again.**

LPI

10:30am-3:30pm

W22 \$40 Intermediate Training

Reducing Erroneous Exclusions: The Workshop!

Eric Ray, CLPE

Criminalist, Arizona Department of Public Safety Crime Laboratory, Phoenix

Penny J. Dechant, CLPE

Criminalist / Latent Print Technical Lead, Arizona Department of Public Safety Crime Laboratory, Phoenix

This workshop is also offered as W21 on Thursday from 1:00pm-5:00pm. The learning objectives are listed under W21. A one hour lunch break is included in the allotted time for W22.

LPD

10:30am-3:30pm

W27 \$30 Basic Training

Developing, Documenting and Lifting Latent Prints on Regular, Unusual and Textured Surfaces

Owen M. McDonnell Jr., CLPE, CCSA, CTPE

Lieutenant, Crime Scene Investigations Division, Caddo Sheriff's Office, Shreveport, Louisiana

Cole, Jason

Latent Print Examiner, Henderson Police Department, Nevada

This workshop is also offered as W26 on Thursday from 1:00pm-5:00pm. The learning objectives are provided under W26. A one hour lunch break is included in the allotted time for W27.

LPI

10:30am-3:30pm

W30 \$30 Basic Training

Latent Print Analysis: Hints, Tips & Clues

Scott Osborn

Senior Scientific Officer, Forensic and Data Centres, Australian Federal Police, Australia

This workshop will expose latent print examiners to the foundations of the fingerprint science, looking at the development of Identification standards and legal precedents that have shaped our science today. Through practical exercises you will Learn and understand all the basic visual tools that can be used when performing latent print analysis from orientation to finger nominations, trends and the visual cues that will enable you to confidently and effectively analyse, search and compare latent prints. At the completion of this workshop you will be able to;

- Discuss the historical development of identification Standards and legal precedents;
- Understand the concepts of Uniqueness and Persistence;
- Identify different areas and general trends of Friction Ridge Skin from fingerprints to footprints;
- Apply identification methodology

A one hour lunch break is included in the allotted time for W30. This workshop will not be offered again.

PEI

10:30am-3:30pm

W38 \$40 Intermediate Training

Evidence Photography for Examination Quality Images (Level3)

Mark Zabinski, CLPE, CSCSA and JoDon Edwards

Criminalist II, Latent Print Examiners, Rhode Island State Crime Laboratory

To provide a Crime Scene Investigator or Latent Print Examiner with the basics of obtaining examination quality photographs of Latent Prints and two dimensional and three dimensional Footwear and Tire Track Impressions on challenging surfaces and substrates. Student labs will demonstrate the following techniques that can be applied at the Crime Scene or in the Laboratory:

Latent Prints Techniques Utilizing:

- Direct Reflective
- Axial Lighting
- Transmitted lighting
- Latent print reflective object
- Fluorescent Impressions
- Hot spot

Footwear and Tire Track:

- Side lighting to accentuate texture in 3D Impressions
- Oblique lighting for 2D Impressions
- Photography of footwear on gel lifts
- Angled Impressions

Utilizing the techniques applied in this workshop, the student will be able to approach photographing difficult impressions with ease. Students are required to bring:

- DSLT Camera
- Charged Camera Battery
- CF or SD card
- Tripod
- Flash
- Sync Cord
- Close-up and Zoom Lens

A one hour lunch break is included in the allotted time for W38. This workshop will not be offered again.

PEI

10:30am-3:30pm

W102 \$30 Intermediate Training

Crime Scene Photography Basics (level 2)

Robert A. Young, CFPH

Police Photographic Technician, Mesa Police Department, Arizona

This workshop is also offered as W65 on Thursday from 1:00pm-5:00pm. The learning objectives are provided under W65. A one hour lunch break is included in the allotted time for W102.

LPI

12:30pm-3:30pm

W78 \$30 Intermediate Training

The Probabilistic Approach in the Latent Print Comparison: A Path Forward

Dr. Aldo Mattei

Deputy Director, Carabinieri Scientific Investigation Service, Messina, Italy

For trained and experienced fingerprint experts as we are probabilities are not what we like to deal with. It seems to be too complicated, too fuzzy and far away to daily routine reality. Today our attitude is to provide a black or white type of answer. But what about the shades of grey in between? This workshop will give to the attendees the possibility to approach the concepts of probabilities and likelihood ratios applied to the latent prints comparison, from the perspective of a latent fingerprint expert. Moreover, it will be possible to gain the knowledge on how to deal with such concepts without having any “magic mathematical tool” which can provide the “right numbers”. In our opinion fingerprint comparison science should move towards a more robust scientific approach. Since 2009 the NRC report has given such direction and OSAC working groups are considering this perspective. Europe since early Nineties started considering the application of the Bayesian theory to pattern recognition and specifically to fingerprint comparison. Nowadays the Bayesian approach in the fingermark comparison by means of a verbal scale based on the professional opinion of the fingerprint experts is currently used at some European forensic institutes. Join the workshop and learn how to use these tools in your daily job! **This workshop will not be offered again.**

PEI

1:30pm-3:30pm

W40 \$30 Intermediate Training

Photographing Laser Trajectories in Daylight

Andrew Taravella, CFPH, CSCSA

Senior Police Officer, Houston Forensic Science Center, Texas

Dr. Tammy Barette, CSCSA

Training Specialist, Houston Forensic Science Center, Texas

This workshop is also offered as W39 prior to this workshop from 10:30am-12:30pm. The learning objectives are listed under W39.





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