Hello everyone,

June is upon us already. Where has the time gone? I want to wish everyone a safe and memorable summer.

At the time of this issue’s release, many of us will have the pleasure of participating in the valuable training at the 2019 European Conference in Paris – Pointoise. I am pleased to have the opportunity to be present at the event and look forward to seeing many of you there. I know Celine Nicloux have put a great effort into the training conference, and note that it is sold out. Bravo Celine!

The 2019 Annual Training Conference in Chicago is starting to shape up thanks to the hard work of Jeff Gurvis and Rebecca Hooks. The conference is being held between October 29 and November 1, 2019. If you’re planning to attend, now is the time to do so. Information relating to registration and accommodations can be located on the IABPA webpage. I would also urge those of you who have thought about contributing by way of a presentation or workshop, to do so. Please reach out to Jeff and speak with him about becoming involved.

I am very pleased to see the return of the Journal of Bloodstain Pattern Analysis and hope all of you are as well. Jeremy Morris has worked very hard to bring the Journal back to us. The March issue provided important information to our members. Just about anything you may be looking for pertaining to the IABPA can be found in the March issue. I continue to encourage you to submit material to our Journal. I am certain many of you are doing very interesting things and it would be beneficial to share that information. The discipline benefits from the sharing of our work through articles of case studies, technical studies, and scientific studies. Just look back to the articles in previous Journals that are available on our website to see the information that has been shared. I hope it will give you inspiration to submit material.

Lastly, I would encourage all IABPA members who meet the criteria to participate in the Black Box Evaluation of Bloodstain Pattern Analysis Conclusions study. This undertaking is being conducted by Paul Kish, Kevin Winer, and Noblis under a grant from the U.S. National Institute of Justice (NIJ). The objective of this study will be to assess the scientific basis of bloodstain pattern analysis (BPA) by conducting a black box study measuring the accuracy, reproducibility, and repeatability of BPA conclusions, and associating these results with the education and training of participants. The results of the study will provide necessary information about the discipline to laboratory managers, to practitioners, and to the legal system. I believe this is a worthwhile project and should provide valuable insight into this important aspect of our discipline. Further information and links to the study can be located on the IABPA Homepage.

Best regards,

President’s Message.
Gord Lefebvre, gordlefebvre@gmail.com

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### 2019 Officers

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<th>Position</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Gord Lefebvre</td>
<td><a href="mailto:gordlefebvre@gmail.com">gordlefebvre@gmail.com</a></td>
</tr>
<tr>
<td>Vice President – Pacific</td>
<td>Lauren Sautkulis</td>
<td>laurensautkulisdsheriff.org</td>
</tr>
<tr>
<td>Vice President – Mountain</td>
<td>Brittany Nelson</td>
<td><a href="mailto:brittenyanelson@slcgov.com">brittenyanelson@slcgov.com</a></td>
</tr>
<tr>
<td>Vice President – Central</td>
<td>Christine Ramirez</td>
<td><a href="mailto:Christine.Ramirez@teex.tamu.edu">Christine.Ramirez@teex.tamu.edu</a></td>
</tr>
<tr>
<td>Vice President – Eastern</td>
<td>Robert Jones</td>
<td></td>
</tr>
<tr>
<td>Vice President – European</td>
<td>Philippe Esperanca</td>
<td><a href="mailto:expert.morpho@gmail.com">expert.morpho@gmail.com</a></td>
</tr>
<tr>
<td>Vice President – Oceanic-Asean</td>
<td>Shawn Harkins</td>
<td><a href="mailto:hark1sha@police.nsw.gov.au">hark1sha@police.nsw.gov.au</a></td>
</tr>
<tr>
<td>Sergeant at Arms</td>
<td>Lisa Perry</td>
<td><a href="mailto:Lisa.Perry@mesaaz.gov">Lisa.Perry@mesaaz.gov</a></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Anthony Mangione</td>
<td><a href="mailto:amangione@iabpa.org">amangione@iabpa.org</a></td>
</tr>
<tr>
<td>Historian</td>
<td>Celestina Rossi</td>
<td><a href="mailto:Celestina.Rossi@mctx.org">Celestina.Rossi@mctx.org</a></td>
</tr>
</tbody>
</table>

### Association Committees

#### Education Committee
*Chair*- Erin Sims  
Holly Latham  
Beverly Zaporozan  
Josita Limborgh  

#### Ethics Committee
*Chair*- Rich Tewes  
Rob Jones  
Gillian Leak  
Matt Noedel  
Colin Hoare  

#### Membership Committee
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Andrea Berti  

#### Publications Committee
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Brian Yamashita  
Daniel Mabel  
Paul Kish  
Celestina Rossi  
Stuart James  

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### Journal of Bloodstain Pattern Analysis

*Jeremiah A. Morris, Editor  
forensicbpa@gmail.com*

#### Publication staff
Alison Gingras, Nikki Blackwell, Jeff Gurvis  

The *Journal of Bloodstain Pattern Analysis* is published quarterly and is the official publication of the *International Association of Bloodstain Pattern Analysts*. The *Journal of Bloodstain Pattern Analysis* is committed to the dissemination of information relevant to the *Association*, its members, and the discipline of bloodstain pattern analysis.  

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Bloodstain Pattern Analysis Black Box Study
Requesting Participation

Purpose
The purpose of this study is to evaluate the accuracy and reproducibility of bloodstain pattern analysts’ conclusions. Paul Kish, Kevin Winer, and Noblis are conducting the study under a grant from the U.S. National Institute of Justice (NIJ).

Study Overview
Participants will be asked to examine 100-200 bloodstain patterns over a period of approximately 2-3 months. The test will be conducted entirely in a web-based, digital format (no physical images or samples will be sent to the participants). Participants will be able to leave and return to their examinations as needed. The bloodstain pattern test samples comprise a range of complexity that are broadly casework representative and include patterns from both controlled collection and operational casework.

Participation
Participation is open to bloodstain pattern analysts who have conducted operational casework within the past two years — including full- and part-time analysts. Analysts from any country are welcome to participate, but must be reasonably fluent in English to participate in order to minimize the potential for misunderstandings. Completion of a signed consent form and a background questionnaire is required for all participants.

Schedule
The test is expected to be available to participants in mid-late 2019.

Anonymity
All results will be anonymous and care will be taken so that results are not aggregated in a way that compromises anonymity. All questionnaire information and test results will be kept separate from personally identifiable information so that results cannot be associated with specific individuals. Anonymity will be assured through the use of participant ID numbers and controlled flow of information. Results will be coded in a way that will allow participants to see their own anonymized results after the completion of the study, if they choose to do so.

Reporting
Results will report overall accuracy and reproducibility, as well as any associations between accuracy and reproducibility and the participants’ education, training, and experience. The results will be presented at forensic conferences and published in a peer-reviewed journal.

Interested in participating? Email Bloodstain@noblis.org
Make the science better— 
share your research and experiences!

The goal of the *Journal of Bloodstain Pattern Analysis* is to be the primary venue of information related to the IABPA as well as the science of bloodstain pattern analysis. The Publication Committee can gather information about the Association, upcoming training, and published papers; however, this is only a small part of the available information out there. We need your help.

We know members of the IABPA—practitioners, instructors, and researchers—are constantly learning new things about the science. Unusual patterns are observed at scenes, training exercises create patterns with unexpected features, or research fills in knowledge gaps. We are asking you to share this information with others in the discipline by submitting it to the *Journal* for publication. There are numerous possibilities:

- Images of a pattern with a brief description
- Summary of a case and lessons learned
- Results of experimentation
- Manuscripts of a research project
- Summary of published articles on a specific topic
- Review of new technology or a new product

All case reports, results of experimentation, research projects, and summary articles will go through a true blind peer review process in order to assure any content within these categories is scientifically valid and also of high quality. If you have any questions, please don’t hesitate to reach out to the Editor or anyone on the Publication Committee.

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**Trick of the Trade**

When documenting an impact pattern for computer-assisted directional analysis, one of the most laborious steps is obtaining close-up images of individual stains. The typical technique involves using a camera on a tripod. Numerous, time-consuming steps are required moving from one stain to another (e.g., adjusting the height of the tripod, re-focusing the camera).

Using a quadrapod dramatically improves this step. Mount the camera on the quadrapod and then place it on the wall. Once adjustments are made for zoom and focus, all that is needed is to move the quadrapod from one stain to the next along the wall. For typical walls, because all of the stains are on the same plane, no additional adjustments are needed for focus. This technique was used to obtain close-up images of over fifty individual spatter stains in five to ten minutes.
2019 Annual Training Conference

Conference Dates: October 29—November 1, 2019

Conference Site: Crowne Plaza Hotel—Chicago West Loop

Conference hosts: Jeff Gurvis and Rebecca Hooks

Hotel information
Crowne Plaza Hotel—Chicago West Loop
25 S Halsted St, Chicago, IL 60661
Phone: (312) 829-5000

The hotel is located in the heart of the city. A special discounted rate of $169/night has been negotiated for the IABPA. Use the below link for booking. We expect a large attendance so it is strongly encouraged to book as early as possible.

Booking Link: IABPA Annual Conference

Cut-off Date: 9/18/19

Reservations must be made online or by phone (312.829.5000). Please mention Group Code BPA when making reservations.

Registration: Rate is $475 for members and $500 for non-members until August 31, 2019. The rate for students is $450.

Click the links above to register for the meeting.

Travel Info: The hotel is located in the heart of Chicago so you can fly into O'Hare or Midway Airports. You can take the trains into the city from either Airport.

Local attractions
Navy Pier https://navypier.org/
Shedd Aquarium https://www.sheddaquarium.org/
Field Museum https://www.fieldmuseum.org/
Art Institute https://www.artic.edu/
Magnificent Mile https://www.themagnificentmile.com/
Willis Tower https://theskydeck.com/
United Center for Bulls (NBA) and Blackhawks (NHL) https://www.unitedcenter.com/
and 1000s more!

Preliminary program
In addition to case studies, presentations will cover the following topics, and others:
- BPA accreditation
- Report writing and testimony
- Uncertainty of measurement
- Artificial intelligence and BPA
- Workshops (to be determined)

There is also a special Halloween event planned (costumes optional). Details to come.
Interested in Hosting the 2020 Annual Training Conference?

The Association is looking for volunteers to host and organize the upcoming 2020 Annual Training Conference. The 2020 meeting is scheduled to be held somewhere in the Mountain Region. This is a tremendous opportunity to not just help promote the discipline and educate attendees, but it is also to become more involved in the Association and expand your professional network.

Anyone interested in hosting the 2020 Annual Training Conference should contact either President Gord Lefebre or the Mountain Region Vice-President Brittany Nelson.
Guest Editorial

Lessons Learned from the Michael Peterson Case

by Bart Epstein

BACKGROUND

In Durham, North Carolina, in the early morning hours of December 9, 2001, Kathleen Peterson was found unconscious by her husband Michael Peterson at the bottom of the back staircase. Michael Peterson called an emergency line to report that he had found his wife and suspected that she had fallen down “15 or 20” stairs. Police arrived and an intense investigation into Kathleen’s death began. Was this an accidental fall down the stairs? Was this a murder by her husband Michael or someone else? Was this an attack by an owl?

The evaluation of the bloodstains deposited on the walls and stairs as well as on the clothing of Michael Peterson became important issues in this case. The evidence gathered led to the arrest of Michael Peterson and his subsequent trial for murder. Michael Peterson was found guilty of first degree murder on October 10, 2003. Due to the fabrication of testimony by a leading bloodstain analyst in this case (see below), Michael was released from prison on December 16, 2011, and another trial was to be scheduled. Before the second trial Michael Peterson took an Alford Plea on February 24, 2017.

Numerous bloodstain pattern “experts” were called into the case to evaluate the bloodstain patterns found in the stairway and clothing of Michael and Kathleen Peterson. These included Duane Deaver of the North Carolina State Bureau of Investigation (SBI), Terry Laber and myself for the prosecution. Timothy Palmback and Henry Lee were used by the defense.

We would all like to believe different qualified bloodstain analysts observing the same materials would come to the same conclusions with respect to how the bloodstains were deposited. This does happen in most cases but it did not happen in this case. I was asked by the Editor not to present the specific conclusions that Terry Laber and I reported but instead to present lessons we learned in general about BPA from this case. Here is what I believe are the major lessons learned.

LESSON #1 – ALWAYS TELL THE TRUTH

Everyone can be tempted to tell little white lies for a number of reasons. It simply cannot be tolerated in forensic science. I will start with a personal story about this subject that influenced my career when for a fleeting moment I considered a white lie.

When I first joined the Minnesota State Crime Laboratory in 1966 I worked on a paint comparison in a burglary case. I was going to testify for the first time and I was nervous. I asked my Lab Director, “When I am asked how many cases I have testified in, what should I say?” He replied in astonishment, “Bart, you tell them this is your first time testifying! Everyone has their first time and in fact they will probably pay more attention to you because it is your first time.” He then went on to ask: “What do you think you should say? ‘I’ve testified 25 times’? Never ‘puff-up’ your credentials. Always tell the truth!” I did just that and never forgot the lesson I learned. You, your reputation, and the reputation of the forensic field, depends on you always telling the truth.

This seems like such a simple axiom for anyone in forensic science that it should not need to be discussed in any detail but it is probably one of the most important lessons learned from the Peterson case. There have
been a number of forensic scientists who have lied on the stand about their test results, examination conclusions, the number of times they have been to crime scenes or times testifying in particular types of cases. When discovered and proven that they have lied, the credibility of the analyst is forever questioned and his career is gone.

This happened to Duane Deaver, the principal bloodstain analyst for the prosecution in the Peterson case. He testified he had worked 500 bloodstain cases, written 200 reports and testified in sixty BPA cases. His superiors later revealed he actually wrote only forty-seven reports and testified in four cases. He also was found to have intentionally misrepresented blood tests in thirty-four different cases. In those cases he deliberately gave false testimony he had “identified blood” even when these “bloodstains” were found not to be blood after being subjected to a confirmatory test. This showed prosecution bias and resulted in Duane Deaver losing his job. All previous cases he worked were reviewed and challenged. In the Peterson case, it meant Michael Peterson would be released after eight years in prison and scheduled for a possible second trial. This was all because Deaver did not tell the truth!

LESSON #2 – ADVOCATE FOR YOUR OWN SCIENTIFIC RESULTS

Analysts must guard against contextual and confirmatory bias. As stated in the 2009 NAS Report, “…many bloodstain pattern analysis cases are prosecution or defense driven, with targeted requests that can lead to context bias.” ³ Attorneys are rightfully advocates for their client or the State prosecuting an individual. All forensic analysts, including all bloodstain pattern analysts, must strongly resist the pressures applied by attorneys to be advocates for a specific side of the case. You are an advocate for your results! Your results are the result of a scientific analysis and evaluation of the evidence. Science is neutral and your results need to reflect the scientific process. It means you must consider all possible hypotheses for how a particular stain pattern was produced and you have a scientific basis for you conclusions.

In the Michael Peterson case there were some opinions given by blood spatter experts which did not have a valid scientific foundation. Here are three examples: (1) Stating a bloody deposit on one of the stairway steps looks like it could have been produced by a specific weapon without the bloodstain analyst duplicating the pattern. ⁴ This is very prejudicial and has no scientific basis for the conclusion. (2) Stating from the observation of a single stain observed high up on a ceiling header it was caused by case-off. There simply is not enough scientific information in one stain to come to any conclusion. The neutral and correct answer to what caused this stain is “I don’t know.” (3) One of the experts stated observing 10,000 bloodstains at a scene is too many to be caused by a beating. Really! What is the scientific basis for that statement?

Attorneys will want you to make these types of statements but you need to resist. Don’t do it! The NAS Report addressed this area by stating, “Scientific studies support some aspects of bloodstain pattern analysis. … but some experts extrapolate far beyond what can be supported.” ⁵

LESSON #3 – CONSIDER ERROR RATES

In this case, in the opinion of three BPA “experts” the bloodstain patterns observed at the bottom of the stairs and on the clothing of Michael Peterson indicated Kathleen Peterson was beaten at least three times on the head and Michael Peterson had bloodstains on his shorts and shoes that were produced by the beating. Two other “experts” had the opinion the bloodstains at the bottom of the stairs were produced by a fall and the stains on the walls and on Michael Peterson were produced by coughing (expired) blood.

We all know there are numerous mechanisms which produce small bloodstains and the resulting patterns can be similar in their appearance. Spatter produced by a gunshot or impact from an instrument on a bloody surface as well as expired blood from coughing or administering CPR can all produce very small bloodstains. As “experts” we are asked the question, “Which is the correct interpretation of the observed pattern?” ⁶ A heavy burden rests on us to deliver a properly weighted conclusion to the jury based on our
In the Camm case three “experts” said the stains were produced by impact and two “experts” said they were caused by the fall down the stairs and expiration. Who is correct? No matter who is correct, this could be viewed by some that BPA has a 40% to 60% error rate. This amount of apparent error is simply not acceptable. It reflects what was said in the NAS report. “[Extra] care must be given to the way in which the analyses are presented in court. The uncertainties associated with bloodstain pattern analysis are enormous.”

Recent research has been done concerning error rates in BPA. I refer you to the work by Laber, Kish, Taylor, Owens, Osborne and Curran. These researchers reported an error rate of 13.1% on stains deposited on rigid surfaces and 23.4% on stains deposited on fabric based on the specific aspects of the studies. They also found these error rates were influenced by contextual bias.

LESSON #4 – USE CAUTION WHEN DESCRIBING BPA METHODS AND DOING EXPERIMENTS

Semantics are important. In this case, Duane Deaver testified there were a number of impact sites which originated in the air over the floor and stairs at the bottom of the stairway. He said he could trace the blood projections back to three separate “points of origin.” He was rightfully chastised for using the phrase “point of origin” rather than “area of origin.” We all know we cannot accurately project impact patterns back to “a point” but actually only to an “area of origin”. You need to be very careful about using the correct description, nomenclature and semantics when testifying.

Both Duane Deaver and Henry Lee performed experiments for the trial. Most of us in the field have also performed various experiments for research or to test out different hypotheses in a case. How you do your experiments and your conclusions from the experiments are going to be viewed critically by others, as they were in this case. One needs to be careful when doing any experiments and follow standard scientific practices. If you are doing experiments to determine the possible mechanism to produce an observed bloodstain pattern you must always try to include all possible hypotheses in your experiments.

USEFULNESS OF BPA

Although many of the lessons learned from this case indicate we need improvement in many areas, I have always believed that BPA can, and does, have a proper role in forensic science. It is part of the “tool kit” that is available to forensic scientists in the evaluation of a crime scene. If used in conjunction with other forensic evidence, it can help confirm or refute a specific hypothesis in a case. BPA must always be based on scientific observations and not just be the best explanation available. If used properly by trained forensic scientists, BPA can be a very useful tool.

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1 This case has received a lot of attention in the last year. Readers are referred to two resources for more details about this case. A 13 episode series entitled THE STAIRCASE was presented by Netflix in the summer of 2018. The Double Loop Podcast by Glenn Langenburg and Eric Ray presented a four part series (Episodes 175-178) focusing on the forensic aspects of the case in September of 2018.
2 Alford plea - a guilty plea in which a defendant maintains their innocence but admits that the prosecution’s evidence would likely result in a guilty verdict if brought to trial.
4 This is similar to the famous “medical instrument” observed in the Sam Sheppard Case in 1954.
5 NAS Report, op. cit. p 178.
6 This level of disagreement is similar to the David Camm case where three “experts” said small stains were produced by backspatter from a gunshot and three “experts” said the small bloodstains were produced by contact to bloody hair.
7 NAS Report, op. cit. p 179.
First Basic Course in Latin America

Bloodstain pattern analysis continues to make progress around the world. Another example of this progress is the first basic course to be offered in Latin America. From April 22 to 26, 2019, sixteen individuals participated in a basic workshop in Santa Catarina, Brazil. The workshop was hosted by the National Institute of Forensic Science and Expertise and was taught by Antonio Augusto Canelas Neto.

Attendees of the course covered an extensive number of topics including BPA history, terminologies, classifications, fluid dynamics, descriptions of the various pattern types, sequencing, chemical testing, contextual bias, documentation, and report writing. The course ended with a fifty question theoretical assessment as well as a mock scene for a practical assessment.

Congratulations to Antonio and all of the attendees!
BPA Celebrates Ten Years in Korea

The Korean Association of Bloodstain Pattern Analysts (KABPA) celebrates its tenth anniversary. Efforts to bring BPA to Korea began in 2005 when individuals from Korea visited the United States and Canada. After this, numerous instructors traveled to Korea to teach workshops.

In 2008, the KABPA was established. The Korean Police and the National Forensic Service collaborated with each other in these efforts to bring BPA to Korea. Since then, BPA terminology has been translated into Korean, BPA has been used in Korean courts, and numerous local experiments have been conducted over a variety of topics.

Congratulations of all of our bloodstain colleagues in Korea for all of the progress they continue to make to advance the discipline and serve their communities!

Material for this write-up was taken from a report written by Young-II Seo and Yong-Seok Choi posted on the IABPA website
# Become a member of the IABPA

Prior to submitting an online Membership Application, please register [HERE](#) for our website and create your profile. This process allows members to view their membership status and access their payment history and all form submissions at any time.

There are three types of IABPA Membership for which to apply:

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<thead>
<tr>
<th>Member type</th>
<th>Description</th>
<th>Online Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associate</strong></td>
<td>A member who has NOT completed an IABPA-Approved 40-hour Basic Bloodstain Pattern Analysis course but who desires to become a member of the IABPA for general interests.</td>
<td><a href="#">APPLY NOW</a> for Associate Membership</td>
</tr>
<tr>
<td><strong>Provisional</strong></td>
<td>A member who has been recommended by a Full Member in good standing and who has completed a 40-hour Bloodstain Pattern Analysis course that meets the recommendations of the IABPA Education Committee*. (Course content defined by IABPA Education Committee guidelines include supervised, practical, laboratory-based practical assignments).</td>
<td><a href="#">APPLY NOW</a> for Associate Membership <a href="#">Submit a copy of your course certificate</a></td>
</tr>
<tr>
<td><strong>Full</strong></td>
<td>A member in good standing who has held the position of Provisional Member for at least ONE YEAR, and, who has been recommended based upon efforts in the field of study of bloodstain pattern analysis.</td>
<td><a href="#">Request for Promotion to Full Membership</a></td>
</tr>
<tr>
<td><strong>Distinguished</strong></td>
<td>A member who has rendered significant service to the discipline or the Association and has been awarded the designation by his or her peers*.</td>
<td><a href="#">View our current list of Distinguished Members</a></td>
</tr>
</tbody>
</table>

*Course Requirements

To nominate a Member in good standing for Distinguished Membership, submit a Nomination Form [HERE](#).
### Basic Bloodstain Pattern Analysis
- **Date:** June 03-07, 2019
- **Location:** Brownsburg Police Department
- **Instructor:** Jan Johnson

### Bloodstain Pattern Analysis II
- **Date:** June 24-28, 2019
- **Location:** Colorado Springs Police Department
- **Instructors:** Jonathan Priest / Tom “Grif” Griffin

### Bloodstain Pattern Analysis I
- **Date:** July 22-26, 2019
- **Location:** John H. Stamler Police Academy
- **Instructor:** Melissa Fernandez

### Advanced Bloodstain Pattern Analysis
- **Date:** August 26-30, 2019
- **Location:** CSI Academy of Florida
- **Instructor:** Kimberly Long

### Advanced Bloodstain Pattern Analysis II
- **Date:** September 23-27, 2019
- **Location:** Cullman Police Department
- **Instructor:** Jan Johnson

### Advanced Bloodstain Pattern Analysis
- **Date:** October 07-11, 2019
- **Location:** St. Charles County Police Department
- **Instructor:** Jan Johnson

### Advanced (Scene Based) Bloodstain Pattern Analysis Training Course
- **Date:** Aug 19-23, 2019
- **Location:** Forensic Science Training Institute
- **Instructors:** Dr. Mark Reynolds / Sgt. Dave Spivey
**Bloodstain Training**

**United States and Canada**

**Basic Bloodstain Pattern Analysis**  
October 14-18, 2019  
Forensic Pieces  
North Palm Beach Police Department  
Pasadena, CA  
Jan Johnson

**Bloodstain Pattern Analysis**  
October 21-25, 2019  
GRAFF Investigative & Forensic Training / Tritech Forensics Training  
St. Louis County Police  
St. Louis, MO  
Iris Dally Graff / Gary Graff

**Bloodstain Pattern Documentation Class**  
October 21-24, 2019  
SIRCHIE / Bevel, Gardner & Associates  
Youngsville, NC  
Ross M. Gardner

**Bloodstain Pattern Analysis**  
October 28 – November 01, 2019  
Forensic Pieces  
North Palm Beach Police Department  
North Palm Beach, FL  
Jan Johnson

**Bloodstain Pattern Analysis**  
November 04-08, 2019  
CSI Academy of Florida  
Alachua, FL  
Kimberly Long

**Advanced Bloodstain Pattern Analysis Workshop**  
December 02-06, 2019  
CSI Academy of Florida  
Alachua, FL

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**Did we miss something?**

Although the Publication Committee works hard to find as many of the training opportunities as we can to include in the Journal, there are likely some courses which we missed. If you know of any upcoming bloodstain-related training which we did not include in the Journal, please contact the Editor or anyone on the Publication Committee so we can include it in the next issue.

Additionally, if you know of any open access, online resources which are related to bloodstain pattern analysis, please let us know. Our goal is for the Journal of Bloodstain Pattern Analysis to be a primary source of information around the world regarding bloodstain pattern analysis. You can help us meet this goal by sharing information about resources with us.
Bloodstain Training
Europe and Oceanic-Asia

**Advanced Fabric BPA Training Course**
June 10-14, 2019
Omnium Forensics
Institut de Recherche Criminelle de la Gendarmerie
Paris, France
Ted Silenieks / Mark Reynolds

**The Fluid Dynamics of Bloodstain Pattern Formation**
June 24-28, 2019
Institute of Environmental Science and Research
Institut de Recherche Criminelle de la Gendarmerie
Paris, France
Rosalyn Rough / Mark Jermy

**Advanced Bloodstain Pattern Analysis Course**
July 01-05, 2019
Loci Forensics
La RA.SE.T. Formazione, Ricerca e Sviluppo in collaborazione
Roma, Italy
Martin Eversdijk / Alessandro de Bernardis

**Advanced BPA (English)**
August 36-30, 2019
Usingen, Germany
Silke Brodbeck, MD

**Basic Bloodstain Pattern Analysis Course**
September 09-13, 2019
Loci Forensics
Haverstraat 49 2153 GD Nieuw-Vennep
The Netherlands
Martin Eversdijk / René Gelderman

**Intermediate (Level 2) BPA Course**
September 16-20, 2019
Thames Valley Police Training Centre
Sulhamstead, Reading, RG7 4DX
United Kingdom
Jo Millington / Gillian Leak

**Advanced Bloodstain Pattern Analysis**
October 21-25, 2019
Loci Forensics
Haverstraat 49 2153 GD Nieuw-Vennep
The Netherlands
Martin Eversdijk / René Gelderman

**Bloodstain Pattern Analysis on Textile Course**
November 04-08, 2019
Loci Forensics
La RA.SE.T. Formazione, Ricerca e Sviluppo in collaborazione
Roma, Italy
Martin Eversdijk / Alessandro de Bernardis

**Visualization of Latent Bloodstain Course**
November 18-22, 2019
Loci Forensics
Haverstraat 49 2153 GD Nieuw-Vennep
The Netherlands
Martin Eversdijk / René Gelderman

**Basic BPA (English)**
November 25-29, 2019
Usingen, Germany
Silke Brodbeck, MD
Recent BPA Articles
Published in the Scientific Literature


Recent BPA Articles
Published in the Scientific Literature


Online Resources

Bloodstain Pattern Analysis subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science
Development of standards and guidelines related to bloodstain pattern analysis

Bloodstain Pattern Analysis Video Collection
High speed digital video analysis of bloodstain pattern formation from common bloodletting mechanisms.

BPA-related Presentations at the 2012 Impression Pattern Evidence Symposium
Recorded webinar on presentations on approximation of blood drop trajectory, contextual bias, collection of pattern evidence from a body, reasoning and the scientific method in BPA, and developing and implementing BPA SOPs.

Bloodstain Documentation and Collection Methods
Recorded webinar on a methodology for the documentation, collection, and preservation of blood evidence.

Swipes, Wipes and Transfer Impressions
Recorded webinar on the different types of these patterns and recognizing the value of them.

Error & Uncertainty in Bloodstain Pattern Analysis
Recorded webinar on a general introduction to the concepts of error and uncertainty and how these concepts apply to quantitative and qualitative aspects of bloodstain pattern analysis.

The Sherlock Blood Spatter Analysis System
Freeware developed at Trent University to assist in processing field data and to determine the point of impact for the collected dataset.

Organizational Notices

All changes of mailing address need to be supplied by email to our Secretary Anthony Mangione (amangione@iabpa.org). Members also need to update their contact information profiles on the website.

The fees for application of membership and yearly dues are $40.00 US each. If you have not received a dues invoice for 2019 please contact Anthony Mangione at amangione@iabpa.org. Also, apparently, non US credit cards are charging a fee above and beyond the $40.00 membership/application fee. Your credit card is charged only $40.00 US by the IABPA. Any additional fees are imposed by the credit card companies.

IABPA now accepts the following credit cards: Discover, Master Card, American Express, and Visa.