Journal of Bloodstain Pattern Analysis

The Official Publication of the
International Association of Bloodstain Pattern Analysts

December 2012 Volume 28 No. 4

Table of Contents

2012 IABPA Officers

PRESIDENT
Todd A. Thorne
tthorne@kenosha.org

Vice President, Region I
Carolyn Gannett
GannettForensics@aol.com

Vice President, Region II
Leah Innocci
linnoc1@gmail.com

Vice President, Region III
Rex T. Sparks
rtsparks@dmgov.org

Vice President, Region IV
Anthony Mangione
amangione@hamiltonpd.org

Vice President, Region V
Peter Lamb
peterlamb@fss.pnn.police.uk.

Vice President, Region VI
Brett McCance
brett.mccance@police.wa.gov.au

Secretary / Treasurer
Norman Reeves
norman@bloody1.com

Sergeant at Arms
Nicholas A. Paonessa
nicholas.paonessa@niagarafallsny.gov

Immediate Past President
Iris Dalley
scsairis@hotmail.com

Historian
Stuart H. James
jamesforen@aol.com

President's Message

As this year comes to its end, so too does my service as your President. It has been a privilege to serve in this capacity. I have appreciated all the emails, phone calls and conversations over the past years. A personal note of thanks to the Board for dedicating so much time and energy to the continued progression of the IABPA.

Stuart James, DeWayne Morris and I were all able to attend the 4th European Educational Conference in Edinburgh, Scotland. This was undoubtedly one of the finest conferences I have ever attended. The educational line up, accommodations and attention to detail were unparalleled to any training I have attended in a very long time. Additionally, it was of great personal joy to see a part of the world where my ancestry prospered.

As the New Year begins, I encourage all of you to get involved with the IABPA. There is still much to do within the discipline of bloodstain pattern analysis. Please get involved in a committee or contribute to the Journal. New ideas can often be the lifeblood of an organization. As I move forward to the position of Past President, I look forward to continued service to all of you. There is always much to do.

I trust that all of you have had a wonderful Christmas and are ready for whatever 2013 may have in store for each of us.

Blessings,

Todd A. Thorne

TECHNICAL ARTICLE

Using Infrared Photography to Document Clothing Evidence in the Reconstruction of a Homicide

Michael Gorn and Stuart H. James

Introduction

Background on Infrared Photography

The use of infrared (IR) photography in forensic casework has been well documented in the forensic literature. It has primarily been used for the documentation of gunshot residue patterns and blood staining on dark colored clothing (1, 2), although it has also been used for the photography of latent tattoos and for the characterization of different types of inks. The principle behind the infrared photography of blood stains is that many dyes and fabrics reflect a large amount of infrared radiation, whereas blood stains absorb most wavelengths of visible light (400-700 nm) and near infrared light (700-900 nm). This results in the fabric appearing gray or white with the contrasting blood staining darker in color. The enhanced contrast between the fabric and the evidence (blood) allows the examiner to better interpret the evidence and assists in sample selection for further testing (i.e. phenolphthalein, DNA). This technique is especially useful due to its non-destructive nature, its lack of interference with serological/DNA testing and its relative simplicity to perform.

As a brief casework example, Figure 1 shows a shirt which was submitted to the serologist for blood stain interpretation and testing. Due to difficulty visualizing the staining in contrast to the fabric, a request was made for infrared photography. Figure 2 is the IR photograph of the shirt, which clearly shows the blood staining in contrast to the fabric of the shirt. This image allowed the serologist to visualize locations on the item that were most likely to provide probative samples for further testing and interpretation.

Figure 1. Image of shirt before IR photography.

Figure 2. Image of Shirt after IR photography.

Description of the Case

On January 3rd, 2012, the Sarasota County Sheriff's Office received a 911 call and responded to an area in the woods in Sarasota, Florida. When deputies arrived, they were met by an apparent eyewitness who led them to a camping area shared by himself, the suspect and the victim. Reportedly, the three men were drinking rum and cooking a meal over a camp fire when an argument occurred between the suspect and the victim that resulted in the death of the victim due to injuries inflicted with a machete. The witness was believed to have called 911. The suspect was apprehended shortly after the incident in the vicinity of the campsite.

The victim sustained sharp force injuries to the right side of his face and neck, which included breaching of arteries. This resulted in projected blood stain patterns manifested as arterial spurting and saturation of blood on the ground at the campsite in an area between the campfire and the sheltered tent. The saturation blood stain pattern on the ground in this area indicated the location of the victim when depositing blood. A machete, located in a campfire near the site of the attack, was believed to be the murder weapon (Figure 3).

Also, near the campfire and the site of the attack, was a white plastic chair in which the suspect was believed to have sat and was known to be his chair. This chair exhibited a pattern of near circular projected blood stains, with many of the stains having been altered while wet (Figure 4). There were also small projected blood stains on the left side (as seated) of the backrest of the chair that exhibited downward directionalities.

The witness stated that he was standing close to the victim at the time of the attack and that afterwards, the suspect ordered the witness to take off his shirt and to place it in the campfire. An examination of the campfire, once the flames had subsided, yielded no apparent fabric or similar material. The witness also stated that he was unsure if the suspect changed clothes after the attack and at one point described the suspect as wearing denim pants. At the time of apprehension, the suspect was wearing a pair of black cargo pants. In order to reconstruct aspects of the incident and account for the locations of the suspect and witness during the attack, a blood stain pattern examination was conducted on their clothing as well as the bloodstain patterns located at the scene. This included the use of infrared photography to document the staining on the suspect's black cargo pants.

Figure 3. Overall image of campsite showing machete in the fire, site of attack denoted by pool of blood and chair in which the suspect was believed to have sat.

Figure 4. Seating portion of chair closest to point of attack exhibiting bloodstains.

Materials and Methods

A Fuji IS-Pro was used to photograph the cargo pants with a Peca #906 (87A) lens filter. This filter blocks out all visible wavelengths of light and only allows infrared wavelengths to pass through to the camera's detector (Figure 5). Photographs were taken using a remote shutter release, with the camera placed on a tripod positioned at a 90 degree angle to the fabric. Normal copy stand lights provided lighting since they have high emission in the infrared region of the electromagnetic spectrum.

On the camera itself, the live image preview mode allowed adjustment of the camera settings required to get a suitable image since the color of the filter prohibits direct focusing of the lens and alignment of the item. This mode allows for adjustment of the brightness of the image and focusing on the L-shaped ruler.

Adobe Photoshop CS5® was used to crop and invert the image of the seat of the pants for comparison to the image of the chair. Photoshop was also used to make both images 1:1 for comparison using the scales in place on the pants and the chair.

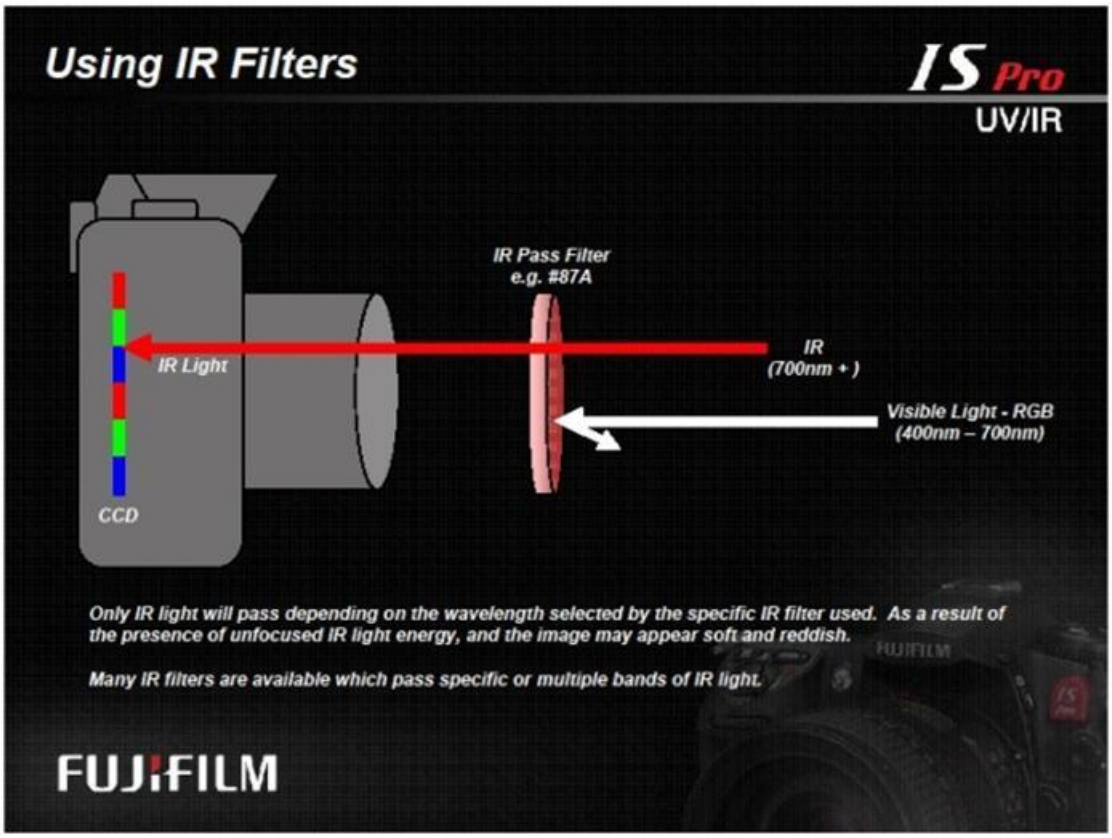

Figure 5. Diagram showing how infrared radiation passes through the lens to the camera's detector.

Results and Discussion

A blood stain examination of the clothing from the witness showed that he was in proximity to the victim when arterial spurting occurred. This was due to the presence of projected blood stain patterns on the front legs of his blue jeans and shoes. This physical evidence confirmed what the witness said about his location when he was originally interviewed.

Examination of the suspect's cargo pants yielded the following types of staining. The front of the pants exhibited two small spatters near the right thigh pocket and small spatters on the lower right leg. The backside seating (buttock) area of the pants exhibited a pattern of near circular to circular stains in the size range of approximately 2.0 to 7.0 millimeters. The size and distribution of these stains within the pattern were similar to a projection mechanism. Some of the stains had been altered (wiped) as the result of motion while being deposited. Presumptive testing for blood on one of these stains was positive.

Given the conflicting information from the witness with regards to the suspect's clothing, it was important to document this pattern as closely as possible. Although some of the stains were visible to the naked eye, not all provided suitable contrast; hence the need to use IR photography (Figure 6).

Figure 6. Backside portion of pants worn by suspect before IR photography.

After development of the IR images, a correspondence was noted between the projected staining on the backside of the pants and the projected staining on the seating area of the white plastic chair closest to the point of attack. The staining on the pants was determined to be a transfer pattern from the projected blood stain pattern on the seat of the white chair and resulted from the rear of the pants contacting the seat when the blood stains were wet. Approximately 16 stains on the rear of the pants corresponded with stains on the seat of the chair thereby allowing for a physical "match" to be made (Figure 7). In addition, there were similar corresponding altered stains as the result of wiping between the two surfaces. By using IR photography and performing a physical comparison, it was shown that the suspect was likely wearing the pants at the time of the attack and sat in the chair shortly after the blood had been deposited.

Figure 7. (Top) Backside portion of pants worn by suspect after IR photography. (Bottom) Seating portion of chair also shown with corresponding stains circled in green in each image.

Conclusion

Using IR photography for the documentation of blood staining on dark fabric has been well reported. However, this technique is probably under-utilized in the examination of clothing for blood stain patterns and is one that should be considered in every relevant case. The technique is relatively simple, is non-destructive and does not require the use of blood enhancement reagents which may interfere with further DNA testing. In this case, not only was it useful in providing better contrast between the stains and the color of the fabric, but it allowed for a reconstruction of events in a homicide case and provided probative information for comparison to statements made by the witness.

References

1. Chaklos, D., and Davis, A., Visualization of gunpowder residue patterns using a digital infrared camera and optical filters, AFTE Journal, 37(2), 2005.

2. Perkins, M., The application of infrared photography in bloodstain pattern documentation of clothing, JFI, 55(1), 2005.

Acknowledgement

Thanks to Don Hayes of the Boston Police Department Crime Laboratory for permission to use Figures 1 and 2 as taken in casework by one of the authors. Also thanks to the Sarasota County. Sheriff's Office for approval to use this case for publication.

For further information, please contact:

Michael Gorn
Sarasota County. Sheriff's Office
Forensic Unit
Sarasota, Florida
34230-4115
mgorn@scgov.net

ABSTRACTS OF PAPERS, WORKSHOPS AND POSTERS PRESENTED AT THE FOURTH INTERNATIONAL IABPA CONFERENCE IN EDINBURGH, SCOTLAND, NOVEMBER 12-14, 2012

Application of the Principles of Case Assessment and Interpretation (CAI) to BPA

Graham Jackson
Advance Forensics, UK

Abstract:

Application of the model for Case Assessment and Interpretation (CAI) across many types of expert evidence has revealed the robustness and benefit, as well as some limitations, of key notions that underpin CAI. This presentation will highlight two such notions in relation to BPA cases. Firstly, the nature of expert opinion will be explored and the two basic types of opinion - 'investigative' and 'evaluative' – will be illustrated. The difference between these two types of opinion comes from the different positions that the expert adopts in the inferential process. This difference, in turn, suggests two different roles for the expert. Secondly, the notion of the hierarchy of issues in BPA cases will be illustrated. This notion helps the expert identify clearly the level of issue that is being requested in a case and thereby helps the expert assess whether they have the skill and knowledge to address that issue. These two key notions provide greater clarity on the expert's role not only for experts themselves but also for 'users' of expert opinion. They also guide the expert in the acquisition of relevant data to inform opinions.

Amylase Negative Inclusions in a Bloodstain Pattern as a Sign of Expirated Blood in a Crime Scene Reconstruction

Dr. Silke Brodbeck
Blutspureninstitut
Frankfurt am Main
Germany

Abstract:

In descriptive terminology gas inclusions are often referred to as "bubbles". Gas inclusions are often associated with expirated blood but they are not specific. They can also result as effects of surfaces (e.g. paints) or tissues (e.g. sponges) in which gas and fluid are mixed. Additional techniques are often taken into consideration to support the evidence of expirated blood (e.g. amylase tests). In this case the crime scene of a murder underwent significant cleaning. The presentation presents the bloodstain pattern analysis in this case, where an expirated bloodstain pattern was amylase negative.

Visualisation of Cast-off Patterns

Andy Maloney,
FORident Software, Canada

Abstract:

Currently, cast-off patterns are identified at the scene and then documented using photos and a description of the pattern. Often this is the only information included in a bloodstain report, which makes information about the pattern difficult to communicate to others. Standing at the scene an investigator can visualise roughly where in the room the person was standing when they were swinging the bloodied object that created the pattern, as well as the approximate plane of motion of the swing. So how do we record, analyse and present this information to communicate it to others - particularly those that have not been at the scene? This talk will outline a method of analysing cast-off patterns to produce an approximate plane of motion suitable for a 3D scene reconstruction. This talk is based on the article Visualisation of Castoff Patterns Using 3D Modelling Software, published in the Journal of the Association for Crime Scene Reconstruction. A PDF of the article is available at: *http://hemospat.com/research.php*.

Defence Review Including Case Examples

John Manlove
Forensics Ltd, UK

Abstract:

Do solicitors and barristers understand the statements that are placed in front of them? Although we are trained to report in a way that the jury is meant to be able to understand, is this really the case? Statements are usually made up of pages of text, with few, if any, illustrations to assist the reader in understanding. Very often this understanding has to be provided by the 'defence scientist'. This term does rather imply that we are biased. It is important to understand that most of the time we reinforce or strengthen the case against the particular defendant and work in exactly the same way as 'Crown' scientists. Often, a version of events is provided by the defence where the scientific findings would be expected to be similar to those expected from the Crown's assertion. We also encounter a number of cases where interpretation carried out can be plainly in error. A number of cases will be discussed where erroneous interpretation of bloodstain patterns could have misled the court. These will illustrate the continuing requirement for a balanced interpretation and the need for appropriate peer review. The evidence types discussed will not be restricted to BPA as cases are often multi-evidence.

Pump Up the (Blood) Volume: Simulated Projected Bloodstain Patterns using the Arterial Pump

Jo Millington
Manlove Forensics Ltd, UK

Gillian Leak
Principal Forensics, UK

Abstract:

The practical demonstration of vascular or 'arterial damage staining' in BPA training relies largely upon the use of various syringes and other props to simulate projected bloodstain patterns. The Arterial Pump was developed in order for practitioners to generate and examine stains that more accurately reflect those produced *in vivo*. However, access to this equipment can be limited. This workshop provides participants with a rare opportunity to see the Arterial Pump in action, and to examine and record the blood patterns that can be generated on clothing and surfaces commonly encountered at scenes of crime.

Competency Assessment in Forensic Science

Charles Welsh
Skills for Justice, UK

Abstract:

In November 2010, the Association of Chief Police Officers in England and Wales commissioned Skills for Justice to develop a national competency assessment framework for policing forensics. There are five assessment methods that we recognise as good practice. When assessing an individual, we believe that at least four of these methods should be employed. We have developed a six point practitioner assessment framework, which collectively assesses competence.

- *A Case Review:* Between Line manager/other competent peer and practitioner to assess what was done by practitioner, decision making processes, what could have been done better, review of forensic strategy, overall outcome of items taken for analysis etc.
- *Simulated Competence Check:* Providing the practitioner with a scenario with known outcomes. This can include 'blind trials' where known items are entered into the workflow unknown to the practitioner.
- *Observation (site visit):* Line manager/other competent peer observes the practitioner undertake an agreed number of tasks to assess competence against agreed National Occupational Standards
- *Knowledge Check:* Practitioner undertakes a knowledge check, which is marked by competent peer or line manager to ensure practitioner has knowledge required to perform role competently.

- *Dip-Sampling:* A set number of 'work products' are sampled randomly every month to ensure consistency in competent delivery of work tasks.
- *Complete Annual Appraisal:* To ensure that staff are carrying out the work in an appropriate manner. This could include checks against code of practice and a competence review.

If each of these tests is documented and auditable, the requirements of Section 5 'Personnel' of ISO 17025 and section 8 'Personnel' of ISO 17020 will be met.

Regulating Quality Standards in Forensic Science

June Guiness
OBE
Home Office Forensic Science Regulation Unit
UK

Abstract:

For many years there were calls for regulation through various reviews and reports, the Royal Commission, the Caddy report on the Forensic Explosives Laboratory and the publication of "Forensic Science on Trial". The Forensic Science Regulator (FSR) was appointed in 2008 and is supported with advice from the Forensic Science Advisory Council. The main role of the Forensic Science Regulator (FSR) is to ensure appropriate quality standards are developed, implemented and maintained for the use of forensic science for the Criminal Justice System (CJS) in England and Wales so that the courts and the public can have confidence in the reliability of forensic science evidence. The authorities in Scotland and Northern Ireland have in principle agreed to contribute to and adopt the regulation of forensic science quality standards. The FSR has developed a quality framework and as part of the framework has developed and published his Codes of Practice and Conduct for forensic science providers and practitioners in the Criminal Justice System (the Codes). He has also commissioned the production of a number of evidence specific appendices to accompany the Codes. Bloodstain pattern analysis is one of the appendices of which technical review and consultation will be sought.

Visualisation of Blood and Near-infrared Photography

Elizabeth van Zanten
Politie Midden en West Brabant,
The Netherlands

Rob Spruit
Dutch Police Academy
The Netherlands

Abstract:

In 2008, we initiated a near-infrared imaging project at the crime scene unit of the regional police force Midden en West Brabant in the Netherlands. The main objective of this project was to evaluate near-infrared imaging as an additional forensic tool for the visualisation of blood on dark surfaces. Bloodstain pattern analysis on these surfaces can be a real challenge for forensic investigators, due to the poor contrast between the bloodstain and the surface, especially when this surface is porous. We selected the forty most commonly encountered materials at crime scenes and we measured the relative reflectivity of these materials for wavelengths between 380 nm and 2000 nm at two different angles with a spectrum analyzer. It was concluded that the majority of the tested materials reflect near-infrared radiation (wavelengths longer than 700 nm) whilst blood appeared to absorb wavelengths up to at least 1000 nm. A near-infrared sensitive SLR camera can therefore be an excellent tool to visualise bloodstains on dark surfaces that reflect near-infrared radiation to a certain degree. In resulting images, these dark surfaces are light due to the reflection of the near-infrared radiation and the blood on these surfaces appear as a dark spot due to the absorption of near-infrared radiation. In our experiments, we used a commercially available near-infrared sensitive SLR camera (i.e. Fujifilm IS Pro) and we investigated the effect of several long and bandpass filters and near-infrared sources on the near-infrared visibility of undiluted and diluted bloodstains on previously tested surfaces. In addition, the effect of distance between the object and camera was investigated. It was found that, depending on the nature of the materials, a blood dilution of 1:20 can be registered at a distance of four metres. From additional experiments we learned that

this technique can be used to visualise bloodstains that were covered with a layer of paint or that were covered with soot. Success depends largely on the nature of the surface, the type of paint and the thickness of the layer of paint. Now in 2012, the technique is integrated in our forensic practice in latent blood detection and has proven to be an excellent non-destructive alternative for chemical blood enhancement techniques for blood on dark porous materials.

BPA Examination on Clothing in Light of the 'Right' question'

Mijntje Aarts
NFI
The Netherlands

Abstract:

This presentation will cover the procedure used at the department of Human Biological Traces of the Netherlands Forensic Institute (NFI) to examine clothing and other items that are sent in for bloodstain pattern analysis. Before items are examined, the information received in the case is pre-assessed. This procedure lessens the chance that results of the bloodstain pattern analysis are biased by information given in the case. Also, part of the bloodstains are analysed by two different bloodstain pattern analysts of which the second analyst has no knowledge of the case context to minimise bias. Finally, the bloodstain pattern expert examines the items.

In a pre-assessment it becomes immediately clear that the nature of the question posed by the customer can define the examination strategy and therefore (part of) the outcome of an investigation. As a result, correct formulation of the question is of the highest importance. The case assessment strategy at the department of Human Biological Traces of the NFI will be presented in relation to a case example, through which the importance of the question is illustrated. The case started out as a source level case i.e. from whom could the biological material have originated? However, during appeal sessions in court the activity level was addressed i.e. how did the biological material come to be there? This made it important to consider the findings of the BPA and DNA interpretation in light of the alternative scenarios given by the defence and prosecution.

Case Presentation: The John Brennan Murder

Richard Vallance
SPSA Forensic Services
UK

Abstract:

On 2nd September 2010, the murder of John Brennan took place at his home in the east end of Glasgow. An examination of the scene was carried out by members of forensic staff from the scene examination unit and forensic scientists from the biology and chemistry teams of the SPSA Glasgow laboratory. The chemistry involvement focused on footwear marks that were present in blood and involved the use of chemical treatments on the laminate floor in the hallway and the carpet within the living room. A protein stain was used in the first instance in the hallway followed by the use of luminol in the living room at a later date. The treatment of a mark is the process of emphasising the maximum contrast between the mark and its background without altering the dimensions of the mark. Treatment can also be required when the background on which the mark lies is coloured in a way that it obscures the mark from view.

The luminol examination was a collaboration between chemistry and biology to facilitate a BPA and footwear mark examination in order to help further the police investigation. This case study focuses on the benefits of the use of enhancement techniques for visualising footwear marks in blood at scenes of crime and subsequent limitations regarding confirmation of the presence of blood and the recovery of DNA.

Case Presentation on Behalf of the Crown Office and Procurator Fiscal Service

Alex Prentice QC
Scottish Crown Office
UK

Abstract:

Alex Prentice will discuss how prosecutors present cases where bloodstain pattern analysis evidence is crucial to the successful prosecution of the case. A key factor is the need to consult with those who will give evidence in court. He will use material from two Edinburgh murders as examples: HMA v. Caroline Igoe and HMA v Douglas Stockdale. The Crown Office and Procurator Fiscal Service (COPFS) is Scotland's sole prosecution authority. It is responsible for the prosecution of crime in Scotland, the investigation of sudden or suspicious deaths and the investigation of complaints against the police. They work closely with criminal justice system partners to help make Scotland a safer place. The Procurator Fiscal receives and considers reports of crimes and offences from the police and other reporting agencies and decides whether or not to take action, including criminal proceedings in the public interest. The Procurator Fiscal and his or her deputes also prosecute cases in all courts except the High Court of Justiciary. Core operational work, such as initial case processing, summary case preparation and presentation, Sheriff and Jury preparation and presentation and High Court preparation is managed centrally within three geographical areas - west, east and north federations rather than individual local offices. This ensures that Procurators Fiscal increase specialisms within the core work that COPFS do, and that senior legal staff working across the federations are responsible for a clear category of workload within that jurisdiction.

Case Presentation: BPA in a Cold Case

Andrea Berti
Carabinieri,
Rome, Italy

Eva Sacchi
Sapienza University
Rome, Italy

Abstract:

On 10 July 1991, Countess Alberica Filo della Torre was found dead in her home in Rome. Her body showed several wounds from a blunt weapon and she had a large bloodstained bed sheet wrapped around her neck. The police had two suspects, the son of a child minder and a house servant. The latter had a questionable abrasion on his left elbow immediately after the crime. The investigation and the DNA analysis performed on the bed sheet and many others items did not lead to any result, so after some months the case was closed. In 2010 the case was reopened. Comparative analysis was undertaken of the photograph of the bed sheet wrapped around the neck of the victim, which was taken at the crime scene immediately after the murder, and the bed sheet itself. This helped with the understanding of the way it had been wrapped around her neck and shifted the focus on to two portions of the bed sheet and these areas were further sampled. Two samples showed traces of DNA comparable with that of the suspect. The position of the bloodstains attributed to the suspect also confirmed the reconstruction of the way the bed sheet had been wrapped around her neck. In light of the new evidence the suspect confessed to the murder. He was sentenced to 16 years and the
case was ultimately closed.

Case Presentation: Honour Killing

Andreas Schweizer
Forensic Science Institute
Zurich, Switzerland

Abstract:

Zurich, May 2010. A 51-year-old Pakistani man kills his daughter with a hatchet. Honour killing was the press headline right from the beginning. The court hearing was in April this year, where the father was sentenced to 17 years for murder. Our first forensic report was delivered two weeks after the incident and an additional BPA report (for the attention of the district attorney) was finished four months after the killing. The trial ended without the questioning of the forensic officials. Sometimes the circumstances of a case seem to be clear right from the beginning. Therefore, a key question arises - why all the effort from the forensic officials?

IABPA 2012 - An Update

Todd A. Thorne
President IABPA
Kenosha Police Department
Kenosha, Wisconsin, USA

Abstract:

Violent crimes can result in bloodshed. When liquid blood is acted upon by physical forces, bloodstains and bloodstain patterns may be deposited on various surfaces, including the clothing of the individuals present at the crime scene. Bloodstain patterns can yield valuable information concerning the events that led to their creation when examined by a qualified analyst. The information gained can then be used for the reconstruction of the incident and the evaluation of the statements of the witnesses and the crime participants. The IABPA is an organisation of forensic experts specialising in the field of bloodstain pattern analysis. The purpose of this update is to introduce you to the IABPA, inform you about our association and update you on current areas of interest.

BPA in Road Traffic Collision Investigation – a Forgotten Art?

Chris Gannicliffe
SPSA Forensic Services
UK

Abstract:

Most bloodstain pattern analysis is typically undertaken while examining scenes of violent crime, or examining clothing and weapons from such incidents. However, an application of bloodstain pattern analysis that is frequently overlooked is the examination of vehicles involved in serious road traffic collisions, and the examination of clothing worn by persons alleged to have been in the vehicle at the time of the collision. In such incidents, it is frequently in dispute who was actually driving a vehicle at the time of the collision. Using case examples, it will be demonstrated how bloodstain pattern analysis can help establish the positions of the vehicle occupants at the time of the collision if they have sustained bleeding injuries, and it will be argued that there is a strong case for a closer working relationship between police vehicle collision investigators and forensic scientists.

Blood Search Techniques, The Pros and Cons, The Dos and Don'ts

Martin Eversdijk
Amsterdam-Amstelland Regional Police
The Netherlands

Abstract:

Seventy five years ago luminol was introduced to the forensic field as a blood search technique and has proven to be one of the best and most used solutions in the world for making latent blood traces visible for further forensic investigation. However, the downside is that it is also one of the most misused chemicals at the scene, in a report or at court. This workshop is designed to give the attendee an overall understanding in the 'correct' use of luminol and other blood search techniques such as fluorescein and lumiscene. Topics during this workshop are:

• What are chemical blood search techniques and how do they work?

• Pros and cons of commonly used chemical blood search techniques (including health and safety issues)

• The importance of the application and the adjustability of chemical blood search solutions

• Marking, sampling and photographing blood search techniques (pros and cons of different techniques, at scenes, on clothing and items)

• Court and report writing
• Tips and tricks.

During the workshop there will be demonstrations of:

• Making/preparation of chemical blood search solutions

• Marking, sampling and photographing chemical blood search techniques

• Spraying equipment including the use of compressor sprays

• Material used in and during the application of chemical blood search techniques.

For this workshop you don't need to have a title in chemistry to see the light.

Exploring The Practicalities of Applying Case Assessment and Interpretation (CAI) To BPA Cases

Ben Mallinder
Kathy Robertson
SPSA Forensic Services, UK

Graham Jackson
Advance Forensics, UK

Abstract:

This interactive workshop follows on from the previous day's presentation application of the principles of case assessment and interpretation to BPA. It will include an explanation and demonstration of a kicking and stamping apparatus as a means of providing bloodstain pattern data to inform expert opinions. The aim of the workshop, through seeing the apparatus in action and thinking about its application, is to encourage discussion and exploration of some of the issues that underpin a probabilistic approach to interpretation outlined in the previous day's presentation:

• The nature of probability

• The use of experimentation to inform probabilities

• The handling of the 'absence' of data

• The use of 'mind experiments'

• What to do with 'no comment' cases

• Explanations vs. propositions

• The language used in and the structure of *statements/reports.*

An Introduction to HemoSpat

Andy Maloney
FORident Software
Canada

Abstract:

HemoSpat is a software product that is used to determine the area of origin of a bloodshed incident based on photos of impact spatter and scene documentation. The purpose of this workshop is to give the attendees an overview of the software's basic capabilities and to give hands-on experience with HemoSpat.
The general outline of the workshop is as follows:

1) Introduction/Background
2) A Tour of the Interface
3) (Hands-On) Analysis of a Pattern
4) (Hands-On) Viewing Your Data
5) Summary/Questions/Comments/Suggestions

Backspatter Phenomena

Philippe Esperanca
IGNA
France

Abstract:

Backspatter is the spatter issued from the entry of a ballistic bullet that travels back towards the shooter. Several studies about this kind of bloodstain pattern were published in the 1990s by the Karger team in Germany but the phenomenon left much to be explained. This lecture aims to explain and demonstrate the backspatter phenomenon to you.

A Victim's Revenge: Offender's Bloodstains in Stabbing Incidents

Dennis Boon
NFI
The Netherlands

Abstract:

Bloodstain pattern analysis at a crime scene is generally used for determining the events that caused the bloodstains. However, a crime scene investigation is also about finding evidence to identify the culprit of the crime. Bloodstain pattern analysis can contribute to this, in addition to investigations for traces such as fingerprints, fibres or DNA. In the Netherlands, victims of violent crimes are killed mostly by a stabbing weapon, usually knives. Because a stabbing incident is usually a dynamic event between two or more people and obviously involves a certain amount of rage and uncontrolled movement - it is likely an offender will end up with bloodletting injuries too. The potential evidential value of the offender's bloodstains is evident, therefore detecting them at the scene of crime is necessary and worth the effort. Because indications of offender's bloodstains can be subtle and difficult to discern, it requires BPA training, forensic awareness and experience in casework to be able to recognise and not overlook them. Besides, it is very important to recognise the relevance of searching for these bloodstains at the actual scene of crime. By only examining pieces of evidence such as clothing or bedding in the laboratory, potential offender's bloodstains can be overlooked because of the absence of scene context. To illustrate the significance of searching for and detecting offender's bloodstains at the crime scene, various fatal stabbing cases were evaluated and presented. The results show that putting effort into detecting them can result in a satisfying contribution to a victim's revenge.

Research project on Saliva/Blood Mixtures

Stuart H. James
James and Associates Forensic Consultants Inc.
Fort Lauderdale, Florida USA

Abstract:

Clinical tests for the determination of clotting and coagulation times for therapeutic monitoring of anticoagulant therapy utilise relatively non-invasive venipuncture or lancet piercing techniques. The medically normal clotting times for human blood should only be used as a baseline when considering clotting times in forensic casework. Factors such as high temperature and rough surface texture, where blood has accumulated, will shorten clotting time. Medical conditions and the presence of anticoagulants in the blood that extend clotting times may be an unknown factor. Trauma to the body and organs will release high levels of tissue factor (TF) in response to the injury and this may shorten normal clotting times. Research into the medical and scientific literature has indicated that saliva contains high levels of TF as well, and will accelerate the clotting time of blood. This paper describes experiments to demonstrate that a mixture of saliva and blood will accelerate the clotting time of blood on external surface substrates of porcelain and vinyl tiles.

The Detection Limits of Luminol as a Presumptive Test for Blood

Sabine Hess
Forensic Science Institute
Zurich
Switzerland

Abstract:

Luminol is widely used in the field of forensic science as a presumptive test for blood at crime scenes. However, this test has its detection limits. In the past, cases have shown that some cleaning agents were able to remove blood to the point that no blood could be detected using blood enhancement techniques such as luminol. In this project, the detection limits of different luminol formulations were analysed by observing the impact of different cleaning agents, measuring the chemiluminescence (CL) and testing the sensitivity of different luminol solutions. Within this research two 'homemade' luminol solutions – 'NL normal' and 'DNA friendly' – and the ready to use solution 'lumiscene' were compared. The cleaning test showed that three types of cleaners commonly used in Switzerland were able to remove bloodstains to the point that none of the luminol formulations would work. Furthermore it was demonstrated that the 'NL normal' luminol solution is the most sensitive to detecting cleaned and diluted blood, and has the most reliable CL.

Multimedia Support to BPA Recording at Crime Scenes Investigations

Frank Brown
Andy Mason
SPSA Forensic Services
UK

Abstract:

Through a variety of quality digital media including interactive presentations and 3D reconstruction, the SPSA Forensic Multimedia Unit can present complex evidence types in a way that is clear, concise and easily understood. We can instantly transport detectives, lawyers, jurors and judges back to a crime scene, taking them on an interactive tour of the criminal investigation without a single person leaving their seat. Set up as a dedicated service for the Scottish criminal justice community, the SPSA Forensic Multimedia Unit has been formed specifically to embrace technology and provide a variety of digital media techniques that will support the presentation methods of criminal casework. They say a picture is worth a thousand words and with this technology it really is. This presentation will demonstrate the range of services provided by the Scottish team.

The Issues Surrounding Interpretation of Fingerprints Associated with Blood

Michael Barber
SLR Forensics
UK

Abstract:

A fingerprint that can be said to be composed of blood can be very strong evidence for an investigating officer. When a suspect has legitimate access to an exhibit or a crime scene, fingerprints composed of blood have a great deal more significance than latent, non-blood marks. This is because they place that individual in contact with a given surface whilst the blood was wet, which can be a narrow time frame. The three methods by which ridge detail associated with blood could have been formed are:

1. Ridge detail wet with blood contacting a surface.

2. Ridge detail contacting wet blood already present on a surface.

3. Ridge detail formed in a non-blood contaminant already present on a surface with blood being subsequently ‘coincidentally associated’ with it.

Fingerprints formed by methods 1 and 2 are ‘genuine’ marks in blood as the ridge detail and the way the blood was distributed across it were formed by the same action. However, with method 3 the ridge detail could have been on the surface for seconds, weeks or months prior to blood being splashed or smeared over it. Unless the scientist carrying out the chemical development of the fingerprint for identification purposes also considers how it had been formed, it is likely that it will be described to the court as a 'fingerprint in blood’. This will place the donor of that mark in contact with a surface whilst the blood was wet which is a potential miscarriage of justice.

Chemical Treatment of Footwear Impressions in Blood on Fabric

Kevin Farrugia
University of Abertay
UK

Abstract:

Robust comparisons of enhancement techniques may be limited due to variations (e.g. pressure, contaminant and surface) in the preparation of test footwear impressions. A mechanical stamping rig was developed and used to control the delivery pressure of the mark. The use of chemical enhancement techniques on porous substrates, such as fabrics, poses several challenges predominantly due to the occurrence of background staining and diffusion as well as visualisation difficulties. This is the first systematic study to examine both a wide range of enhancement techniques and the effect of the interaction between the fabric and also the contaminant on the subsequent enhancement. The work presented focuses on impressions in blood but other contaminants such as urine and mud were also investigated. The surface topography and porosity of the fabrics studied were investigated and had an effect on the enhancement abilities of the various techniques. This appeared to be due more to the porosity of the material rather than the topographical nature of the fibre surface. The results demonstrated that several chemical techniques were suitable for the enhancement of footwear impressions in blood on light coloured fabrics irrespective of the nature of the fabric. Fluorescent and chemiluminescent techniques provided excellent contrast on dark surfaces when enhancing footwear impressions in blood. A mechanism for grading the enhancement ability of the reagents for a given impression was also investigated.

Additional Research on Chemical Treatment of Footwear Impressions in Blood on Fabric

Kenny Laing
SPSA Forensic Services
UK

Abstract:

Following on from a PhD study by Kevin Farrugia, further work was conducted that concentrated on common usage of chemicals at crime scenes. Firstly, comparison work was performed to determine what, if any, diffusion took place from each of the reagents. It was established that some of the recognised common reagents (luminol) did alter the size and shape of bloodstain patterns. Protein stains and fluorescein were found not to diffuse the blood pattern. Leading from this, the effectiveness of these reagents was examined in relation to controlled dilutions to try to establish some benchmark for sensitivity. Lastly, Image J software was used to measure the intensity of the fluorescing blood in each image in order to have an objective analysis of the result. The most effective protein dye reagent appears to be AY7. AY7 has continuously given much more intense colour contrasts and fluorescence compared to the other promising protein dye – SG7. WEAA method or methanol-based techniques were consistent. All methanol-formulated results exhibited superior fluorescence regarding intensity. Fluorescein was the most effective peroxidase reagent, producing good fluorescence whilst retaining the bloodstain pattern. Luminol also provided excellent chemiluminescent results, exhibiting an intense blue colour. Unfortunately, diffusion of the blood was witnessed with each luminol test.

Case Presentation: The Murders of Angelika Kluk and Vicky Hamilton

Carol Weston
Nicola Clayson
SPSA Forensic Services
UK

Abstract:

Angelika Kluk, a 23-year-old Polish student arrived in the UK in the summer of 2006. She found work and accommodation at St Patrick's Church, Glasgow. Angelika was reported missing on 24 September 2006. She had last been seen painting shed panels in the garage/workshop that adjoined the church, with the handyman, who was known as Patrick McLaughlin. On 29 September 2006 Angelika's body was found concealed beneath the floorboards of the church. She had been raped, stabbed and badly beaten. It was apparent that the area beneath the floorboards was a deposition site. BPA on blood found within the garage showed that, in all likelihood, Angelika had been murdered within the garage. BPA on a pair of jeans found within a bin in the church grounds indicated the wearer had likely been involved in the murder of Angelika. In spring 2007, after a six-week trial, Peter Tobin, a convicted sex offender, was found guilty of the rape and murder of Angelika Kluk. The work carried out during the enquiry led to Peter Tobin subsequently being investigated in relation to the disappearance of other young women in the UK. One of these was Vicky Hamilton, a 15-year-old girl who had disappeared in 1991. Her remains - and those of another woman, were discovered in 2007 in the garden of a house Peter Tobin had lived in. This case study discusses the forensic work carried out during the investigations, focusing on the vital part BPA played in helping to piece together events.

Case Presentation: Double International Homicide – An Independent Review

Gillian Leak
Principal Forensics
UK

Abstract:

In June 2006, two children were found dead in their cots in the Netherlands. They had both died as a result of multiple stab wounds. The older child had also sustained many defence wounds to her hands. The mother of the children had raised the alarm. She claimed she was working in the kitchen when a man forced his way into the flat, disarming her of a knife she was carrying. In the struggle she sustained minor cuts to her neck and abdomen. She couldn't recall what happened next, except that the man threw the knife onto the hallway floor as he left. She admits that she then entered her daughter's bedroom, without putting on the light, and stroked her daughter's face who seemed upset and was murmuring lightly. She didn't enter the baby boy's room. After lengthy police investigations, the mother was arrested on suspicion of killing both of her children. A trial was held, however the judges were unable to reach a verdict. Gillian was asked by a judge to review the case. This talk will cover some of the observations made in what proved to be quite a complex case. At the end of her investigations, Gillian, together with the scientist for the defence, were called to testify at a re-trial held in Amsterdam in 2010.

Research Impact Spatter Documentation in 3D Real Time

DeWayne Morris
Illinois State Police
Illinois, USA

Abstract:

In February 2011, Sergeant Morris began work on a project to combine exported bloodstain pattern analysis software data with panorama photography in a virtual real time environment for use as demonstrative evidence. Sergeant Morris's presentation will pictorially walk the viewer through this project. Sergeant Morris will discuss the methods, software, and equipment used to accomplish this task.

Abstracts of Posters

Fly Speck/Fly Spotting Seen on Body of Deceased

Joanne Cochrane
SPSA Forensic Services
Glasgow, Scotland

Abstract:

A 56-year-old male reported missing for approximately three hours by concerned family members was found in a wooded area close to his home. He had a single stab wound to his chest with a knife still in his hand. There were signs of fly activity consisting of eggs in nose, mouth and at collar of his shirt. There were blood spots on his face, arms and hands. The spots were small, mostly symmetrical with some showing a small tail. It was concluded that the spots were not impact spatter rather the result of fly activity.

Attempted Disposal of Body and Cleanup of Crime Scene

Pauline McSorley
SPSA Forensic Services
Glasgow, Scotland

Abstract:

Police received an anonymous phone call to report the murder of a young man at an address. Following a search of the house, the body of a young male was found underneath the floorboards with blunt head trauma. There was evidence of an attempt to cut the body into three parts. The body was also fire damaged.

The back of the sofa had been crudely removed and was located in a bin. It exhibited multiple impact bloodstain patterns. A search of bins in the surrounding streets recovered bloodstained clothing, net curtains, a broken lamp and a hammer. Examination of the bathroom at the house revealed diluted bloodstains on the wall and on the side of the bath that had been cleaned. The examination of the hands of the accused who as being held at a nearby police station revealed a DNA profile that matched the victim.

The Murder of John Brennan

Richard Vallance
SPSA Forensic Services
Glasgow, Scotland

Abstract:

John Brennan, (DOB 25/04/1975) was last seen alive on the 28th of August, 2010 and was discovered murdered in the living room of his home address on 02 September, 2010. There were faint footwear marks in blood on the hallway floor and no other visible bloodstaining. Following chemical treatment of the footwear marks in the hallway, they were observed to be leading towards the exit door. A DNA sample taken from one of the marks within the hallway provided a partial profile of the deceased. A Luminol examination was carried out on the living room carpet and footwear marks in blood were detected in front of a couch where the deceased was attacked. A full DNA profile matching the deceased was obtained from the blood on the carpet. The footwear marks were determined to have been produced by Nike Shox footwear and were similar in pattern and size to shoes worn by the suspect.

Murdered with a Hammer or Slipped in the Bath

Dr. Nicola Martin
Mandy Bath
Kirsty McTurk
Amanda A. Pirie
SPSA Forensic Services
Edinburgh, Scotland

Abstract:

On the 20th October, 2009, the body of the deceased was discovered by Police in the bath of her residence. She was partially submerged in water with a large quantity of bedding and clothing on top of her. The husband stated that his wife applied oil before taking a bath and when she was in the bath he pushed her as a joke causing her to fall and hit her head on the bath taps. She fell again hitting her head a second time. He then carried her into their bedroom and laid her on the bed but due to the large amount of blood he carried her back to the bathroom and ran her head under the taps. He realized that she was not breathing and then placed the bedding and his clothing in the bath and attempted to clean the blood from the bedroom and the bathroom.

The postmortem revealed that the victim had sustained fractures to the left side of her skull having been caused by two or more blows. The examination of the bathroom revealed dilute bloodstaining in all areas. There were no patterns of bloodstaining near the bath taps to suggest that impact into wet blood had occurred in that area. It could not be determined if there were impact patterns prior to the blood having been cleaned.

There were minute spots and splashes of blood on the headboard of the bed and surrounding walls in the bedroom. A portion of the mattress had been removed at the left corner nearest the headboard. The foam below was bloodstained. The scientific findings supported for the deceased having been close to or on the bedding in the master bedroom when she sustained head producing patterns of impact spatters.

Operation Margin – Sign of the Times – Tools of Modern Age Murder – Ikea Bags and Wheelie Bins

Amanda A. Pirie
Kirsty McTurk
SPSA Forensic Services
Edinburgh, Scotland

Abstract:

On Hogmanay (31 December) 2008, a human head was found in an Ikea bag on a cycle path in Edinburgh by a dog walker. The head had dyed red hair and appeared to have been wrapped in bedding and black bin bags, all within an Ikea bag. The head and several other body parts were examined and a full DNA profile of an unknown female was obtained. There was a pair of rubber gloves found with the head and a mixed DNA profile from at least two people was obtained on the right glove. Assuming the presence of DNA from the unknown female, the remaining DNA profile originated from an unknown male.

The unknown female DNA was identified. She was last seen alive in November 2007. A search of her flat did not reveal any blood. . A wheelie bin was recovered from the rear of the property contained two black bin bags containing bedding stained with decomposition and entomological material. Dyed red hair was also present.

Upon questioning, her fiancée stated that she had died of natural causes but he made no attempts to resuscitate her or call emergency services because of an outstanding warrant for his arrest. He was found guilty of murdering his fiancée, dismembering her body and dumping her remains around Edinburgh.

Operation Automate – Missing Person and Murder Enquiry of Samantha Wright

Amanda A. Pirie
Kirsty McTurk
SPSA Forensic Services
Edinburgh, Scotland

Abstract:

In January, 2009, a 25-year-old woman, Samantha Wright was reported missing by her family since she had failed to contact them at Christmas She reportedly had disappeared in June 2008 in Edinburgh. In August 2009, the Police issued CCTV images showing her last movements on 12 June 2008 in the company of an unidentified male. In October 2009, this male was identified as Robert Chalmers. His residence and property were examined. There was a wheelie bin situated on a slabbed patio that was concealed by branches. It was found to contain what appeared human remains that were identified as Samantha Wright as well as clothing that she was last seen wearing. The cause of death was inconclusive.

The bedroom of the residence was examined and a large bloodstain was found on the lower underside of the mattress of the bed. The DNA profile matched Samantha Wright. It was not able to be determined if the volume of blood on the mattress could be associated with a fatal blood loss. Robert Chalmers was found guilty of the murder of Samantha Wright.

Attempted Concealment of Fatal Assault

Pauline McSorley
SPSA Forensic Services
Glasgow, Scotland

Abstract:

The day after a party on floor 11 at an apartment building, a male with serious head injuries was found in the service corridor between floors 11 and 13. He later died in a hospital. No assault site was identified where he was found. There were intermittent dripped spots of blood and PABS at the locus including the 13th floor veranda. Shoes bearing dropped blood spots and contact bloodstaining on shoes that could be seen behind the glazed door of flat 66, home of the first accused. Disrupted bloodstain patterns within flat 66 and the adjoining veranda were present. Clothing bearing bloodstaining in the form of impact spatter blood spots all matching the deceased victim were recovered from flat 54 on floor 11, the home of the second accused. Dropped spots of blood in the lift and diluted blood in the bathroom of flat 66 placed a third accused at the scene. Two of the three accused were found guilty of murder.

Operation Miniver

Emily Service
Kirsty McTurk
SPSA Forensic Services
Edinburgh, Scotland

Abstract:

On the 7th February, 2011, it was alleged that the accused assaulted the complainer and the deceased by striking them to the head, face and body. The complainer and the deceased were in a current relationship. The accused was the ex-partner of the complainer. The complainer sustained lacerations to her face and scalp and a broken nose. The deceased sustained fractures and multiple skin splits to his face and head and bruising and grazing to his groin area. when police arrived at the scene, the complainer and deceased were unclothed. The purpose of the forensic examination was to determine if there was any scientific evidence to assist in addressing the issue of whether the accused had assaulted the complainer and/or the deceased.

A Study of Blood Patterns from Kicking and Stamping Reconstructions and Its Application to Case Assessment and Interpretation

Arlene Whigman
University of Strathclyde
Glasgow, Scotland

Elaine Tucker
University of Strathclyde
Glasgow, Scotland

Benjamin Mallinder
SPSA Forensic Services
Dundee, Scotland

Kathyrn Robertson
SPSA Forensic Services
Dundee, Scotland

Graham Jackson
University of Abertay
Dundee, Scotland

Rami Abboud
Dundee University
Dundee, Scotland

Graham Arnold
Dundee University
Dundee, Scotland

James Fraser
University of Strathclyde
Glasgow, Scotland

Abstract:

The aim of this study was to produce initial data sets of blood pattern distributions. These data sets can be used to help assess the weight of the evidence for court and to help inform the scientist's investigative opinions. Reconstruction of kicking and stamping actions into wet blood were carried out using human volunteers and a mechanical simulator. Data sets were produced regarding the blood patterns observed on clothing, footwear and at the locus. These data sets have been used in conjunction with the expertise of the scientist to assign probabilities to the evidence, and using a Bayesian approach to produce a Likelihood Ration (LR). By doing this, the scientist can address the issues put forward by the prosecution and the defence.

A Case of Projected Blood

Dr. Andrew Hart
Metropolitan Police Service
London, UK

Abstract:

A musician was stabbed in the neck and received punches to his head and body outside a nightclub. DNA testing of blood on the suspect's jeans matched that of the victim. The bloodstains consisted of transfer stains and heavy spots of blood and directional bloodstaining that indicated that he was close to a source of projected blood. The suspect claimed that while he was present during the attack took place, he did not carry out the assault rather blood was flicked onto him as he walked past.

Experiments were designed to address whether the blood was projected from a wound onto the jeans or flicked from the victim's hand. The findings favoured projection of blood from a bleeding injury rather than flicking from a bloodied hand but flicking could not be excluded as a possible mechanism of deposition.

INTERNATIONAL ASSOCIATION OF BLOODSTAIN PATTERN ANALYSTS
ANNUAL MEMBERSHIP MEETING IN TUCSON, ARIZONA - MINUTES
OCTOBER 3, 2012

OFFICERS IN ATTENDANCE:

Todd Thorne, President
Carolyn Gannett, Vice President Region I
Leah Innocci, Vice President Region II
Anthony Mangione, President Region IV
Norman Reeves, Secretary Treasurer
Nicholas Paonessa, Sergeant at Arms
Stuart James, Historian

9:30 AM

Membership Chairman Norman Reeves called a special session of the membership meeting to order. The nomination of Martin Eversdijk was put forth for the membership to vote for approval or disapproval. A vote was taken; the motion to approve the nomination was approved.

9:35 AM The special meeting was adjourned.

10:15 AM

President Thorne called the regular membership meeting to order.

LeeAnn Singley made a motion for the advancement of 2012 applicants to provisional members. Grif Griffin seconded the motion. The motion was approved. A motion to approve the advancement was made by Johnnie Aycock and seconded by Phillipe Esperanca. The motion was approved.

The minutes of the 2011 membership meeting were posted at the rear of the room and the readings of the minutes were waived. Celestina Rossi made a motion to approve the minutes and Rich Tewes made a second. The motion was approved.

PRESIDENT'S REPORT

Todd A.Thorne stated he will be stepping aside for the next president and move into the immediate past president role. Thorne thanked Joe Slemko for the website and journal accomplishments, Carolyn Gannett for bylaw changes and Andre Hendrix for the translation committee work

VICE PRESIDENT REGION 1

Carolyn Gannett reported processing eight applicants. Carolyn Gannett discussed California law regarding basic training bloodstain coursed cannot be reimbursed for POST certification at the 40 hours.

VICE PRESIDENT REGION II

Leah Innocci reported one application for promotion to full membership and thirteen applications.

VICE PRESIDENT REGION III

Membership Chairman Norm Reeves summarized Rex Sparks report since he was unable to attend. Rex processed twenty-eight applications and one written in Spanish from Mexico. Rex is also chairman of the ethics committee.

VICE PRESIDENT REGION IV

Anthony Mangione reported that he processed fifty-three membership applications and 8 were promotions to full membership.

VICE PRESIDENT REGION V

Peter Lamb was unable to attend and Chairman Reeves summarized his report. With the closure of the FSS, there has been a seizure of all computers, making it a challenge to find information from former contact and keeping up with "business." There has been an increase in membership applications, as several countries are applying for accreditation in BPA.

VICE PRESIDENT REGION VI

Brett McCance reports an increase of 30% in membership applications. They are working at training 3 different levels of analysts Recent accomplishments include having BPA sessions at the ANSFSS in Tasmania.

SERGEANT AT ARMS REPORT

Not requested.

MEMBERSHIP COMMITTEE

Chairman Norman Reeves reported all regions processed one hundred fifty-five applications and twenty-six requests for promotion.
There were a total of eight hundred fifty-six members, provisional, full, associate and distinguish members in 2011. There are a total of nine hundred and eighteen in 2012, a net gain of sixty-two.

TREASURER'S REPORT

Norman Reeves, secretary/treasurer reported that the financial report was provided at the meeting. Historical financial information was provided such as in net worth in 1985 was $2023, 1990- $10,296, 1995- $31,000 and in 2012 as of August $201,000.
The payments at the website have been of great assistance with dues and other payments eliminating terminal processing separately. Procedural adjustments were made and are now in place for smooth processing. There is still a need for bank transfers, manual input on the web by certain persons and agencies.
LeeAnn Singley inquired regarding what "Other" meant in the report regarding general expenditures. Reeves explained the program lists the top 5 and all other are listed as others.
It was noted that in recent history, 2000, the year following the 1999 conference that incurred $400,000 debt and 2011 were the only years that expenses were more than income.

HISTORIAN'S REPORT

Historian Stuart James made a request for photographs from conferences for archiving with the historian.

Pat Laturnus inquired regarding materials that Herb MacDonell was in possession of and whether they were ever provided to the organization. LeeAnn Singley stated that David Baldwin's office had offered to scan MacDonell's documents but never received the documents.

CERTIFICATION COMMITTEE REPORT

Don Schuessler reported that the process began in Portland 2009 after the NAS report. Then President Iris Dalley asked Don to research and poll members and without a majority the poll indicated that if there was certification that it be done by the IABPA.

The committee this year increased its members to fourteen. This is a slow process of putting together programs in case the government mandates it.

One proposal is a two-tier system- Academic Certification entailing a 40-hour basic course, 120 hours of casework, proficiency and practical certification which entails an 80-hour advanced course. Comments are welcome to the committee. Todd Thorne indicated that he has spoken to IAI about partnering with them and this has not occurred.

EDUCATION COMMITTEE REPORT

Chairperson Leah Innocci indicated that it has been a challenging year. The committee has been working on a draft for the 80 hour advanced course which should be ready for voting in 2013. The basic course requirements is being revisited and they will look at SWIGSTAIN's document regarding introductory courses. Four course curriculums were reviewed and one was approved. The committee is looking for volunteers.

LeeAnn Singley inquired regarding 80 hour advanced courses and if they must be 80 hours all at one time. Leah indicated the proposal is the 80 hours can be a follow up to the 40-hour face-to-face course.

ETHICS COMMITTEE REPORT

President Thorne reported one complaint was received and it is not yet completed.

PUBLICATION COMMITTEE

Chairman Stuart James discussed the Journal and the need for articles. The abstracts from the 2012 Tucson conference will be published. Stuart stated he is considering a publication three times a year as opposed the current four times a year.

Rich Tewes inquired regarding the criteria for submission of articles. Stuart stated it was published some time ago and would be re-published and put on the website.

Stuart indicated an article is being submitted for peer review by Paulette Sutton and Paul Kish. Articles are peer reviewed the journal.

WEBMASTER REPORT

Joe Slemko reported the website is not being used as was the original intent and member submitted content is lacking. There should be research articles, etc. submitted for the website by the membership.

DAN RAHN SCHOLARSHIP GRANT COMMITTEE

Chair Lynne Herold reported the committee is going to review the process of submissions and the current grant process. One submission has been approved. The topic is the rate of serum separation in clot formation. Paul Delhauer from the Los Angeles Sheriff's department is doing the study and will have a graduate student working with him.

SWGSTAIN LIAISON REPORT

Carolyn Gannett stated the she and Elizabeth Toomer were involved with input of SWGSTAIN documents generated. The Fall 2011 meeting was attended.
There are twenty-seven members from many countries with backgrounds from law enforcement, lab personnel and academics. By Spring 2012 they provided comments to the quality and assurance subcommittee draft.

AWARDS COMMITTEE

Chair Todd Thorne reported no awards given this year.

TRANSLATION COMMITTEE

Andre Hendrix reported the website contains some translations of the SWIGSTAIN documents. Members of the committee report the difficulty of meeting and discussing and they are modifying how this is done. There are currently German and Turkish translations and it is hoped that Italian will soon follow.

BY-LAWS COMMITTEE

Chairperson Carolyn Gannett reported that by-law revisions were on the table at the back of the conference room for review.

LeeAnn Singley discussed the by-law revisions on the website. A discussion resulted regarding when the revisions were placed on the website regarding the requirement of 60 days prior to the Annual Conference Membership meeting.
Lynne Herold discussed the issue of posting on the website and notification of the Membership.

Jeff Scozzafava mad a motion to table the issue until 2013 and seconded by Rich Tewes. The motion was not recognized and discussion continued.
More discussion regarding the dates that the proposed by-laws were posted on the IABPA website.

Jeff Scozzafava made a motion to table all but one change that did meet the 60-day notification until 2013. Motion seconded by Rich Tewes. Motion carried.
Brian Yamashita requested the by-laws and proposed changes be placed on the screen for all the present members to see. Discussion ensued regarding wording and typing errors.
LeeAnn Singley discussed Article 4 section 2 and asked for wording clarifications. Lynne Herold commented regarding the generality of the wording. Motion by LeeAnn to discuss this by-law change at a later time. Larry Renner seconded the motion. Rich Tewes made a motion to table the entire group of by-law changes until 2013. Jeff Scozzafava seconded the motion. The motion was approved.

NOMINATIONS

President Thorne put forth the board's nominations for 2013.

President - Pat Laturnus
Region 1 - Carolyn Gannett
Region 2 - Leah Innocci
Region 3 - Rex Sparks
Region 4 - Anthony Mangione
Region 5 - Peter Lamb
Region 6 - Brett McCance
Secretary - Norm Reeves
Treasurer - Norm Reeves
Sergeant At Arms - Nickolas Paonessa
Editor - Stuart James

Grif Griffin made a motion to close nominations for region 1.

Jeff Scozzafava nominated Don Schuessler for Region 1. Johnnie Aycock seconded the nomination.
Grif Griffin made a motion to close nominations for region 2. Second by Jeff Scozzafava.
Grif Griffin made a motion to close nominations for region 3. Second by Jeff Scozzafava.
Grif Griffin made a motion to close nominations for region 4. Second by Jeff Scozzafava.
Grif Griffin made a motion to close nominations for region 5. Second by Gillian Leak.
Grif Griffin made a motion to close nominations for region 6. Second by Rich Tewes.
Grif Griffin made a motion to close nominations for Secretary. Second by Gillian Leak.
Grif Griffin made a motion to close nominations for Treasurer. Second by Johnnie Aycock.
Scott Collings nominated Jeff Scozzafava for Sergeant At Arms. Seconded by Joe Slemko.
Grif Griffin made a motion to close nominations for Historian. Second by Rich Tewes.
Motion to accept all nominations made by Rich Tewes and seconded by Scott Collings.

OLD BUSINESS

No call for old business

NEW BUSINESS

No call for new business

ADJOURNMENT

Johnnie Aycock made a motion for adjournment, which was seconded by Larry Renner.

11:45 AM The meeting was adjourned.

Fourth International IABPA Conference in Edinburgh, Scotland - November 12-14, 2012. Photograph was taken at a reception hosted by the Lord Advocate at the Edinburgh Castle.

Recent BPA Related Articles in the Scientific Literature

Schuler, R.L., B.Sc. , Kish, P.E.,M.S. and Plese, C.A., B.Sc, Preliminary Observations on the Ability of Hyperspectral Imaging to Provide Detection and Visualization of Bloodstain Patterns on Black Fabrics, J. Forensic Sci. November, 2012, Vol. 57, No. 6.

Connolly, C., Illes, M. and Fraser, J., Effect of Impact Angle Variations on Area of Origin Determinations in Bloodstain Pattern Analysis, Forensic Science International, 223 (2012), pp. 233-240.

Edelman, G., van Leeuwen, T.G., Aalders, M.C.G., Hyperspectral Imaging for the Age Estimation of Bloodstains at the Crime Scene, Forensic Science International, 223 (2012), pp.72-77.

Association for Crime Scene Reconstruction 2013 Conference

The 2013 ACSR conference will be held in Atlanta, Georgia from February 7 to 10, 2013. The conference program is still in development and will involve 3½ days of presentations. There are numerous openings for research presentations, case studies, and workshops. There will be three rounds of workshops scheduled, two day-time and one night-time. Tentatively these include: Practical Application of Event Analysis, Alternate Light Source Utilization, Laser Trajectory Documentation, Electro-static Dust-print Lifters, and Laser Scanning stations with both the Leica and Faro systems. The conference will be held at the Hilton Garden Inn, one mile south of Hartsfield Jackson Airport. The room rate is set at $99.00 per night. As part of the registration fee, continental breakfast will be provided Tuesday through Friday and lunch will be provided Tuesday through Thursday. Once the contract is finalized, ACSR will provide a link for registration at www.acsr.org. Look for updates as the year progresses. If you have an interest to present, please contact Conference Chair Ross M. Gardner at gardnerross@me.com for further information

Organizational Notices

Moving Soon?

All changes of mailing address need to be supplied to our Secretary Norman Reeves. Each quarter Norman forwards completed address labels for those who are members. Do not send change of address information to the Bloodstain Digest Editor. E-mail your new address to Norman Reeves at:

norman@bloody1.com
Norman Reeves
I.A.B.P.A.
12139 E. Makohoh Trail
Tucson, Arizona 85749-8179
Fax: 520-760-5590

Membership Applications / Request for Promotion

Applications for membership as well as for promotion are available on the IABPA website:
IABPA Website: http://www.iabpa.org

The fees for application of membership and yearly dues are $40.00 US each. If you have not received a dues invoice for 2013 please contact Norman Reeves. 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 MasterCard
American Express Visa

Training Opportunities

January 14-18, 2013

Basic Bloodstain Pattern Recognition Course
Ontario Police College
10716 Hacienda Rd. Box 1190
Aylmer, Ontario, Canada
N5H 2T2

Instructor: Brian Allen
Tel: 519-773-4258
Fax: 519-773-5762
E-mail: Brian.Allen@ontario.ca

March 4-8, 2013

Basic Bloodstain Pattern Analysis Course
Loci Forensics B.V.
Flierveld 59
2151 LE Nieuw-Vennep
The Netherlands

Instructors: Martin Eversdijk and René Gelderman
Fax: +31(0)20-8907749
E-mail: Info@lociforensics.nl

March 4-8, 2013

Basic Bloodstain Pattern Analysis Workshop
Specialized Training Unit
Miami-Dade Public Safety Training Unit
Doral, Florida

Contact: Toby L. Wolson, M.S., F-ABC
Miami-Dade Police Department
Forensic Services Bureau
9105 N.W. 25th Street
Doral, Florida 33172
Voice: 305-471-3041
Fax: 305-471-2052
E-mail: Twolson@mdpd.com

April 8-12, 2013

Advanced Bloodstain Pattern Analysis Course
Loci Forensics B.V.
Flierveld 59
2151 LE Nieuw-Vennep
The Netherlands

Instructors: Martin Eversdijk and René Gelderman
Fax: +31(0)20-8907749
E-mail: Info@lociforensics.nl

April 29-May 3, 2013

Math and Physics for Bloodstain Pattern Analysis
Ontario Police College
10716 Hacienda Rd. Box 1190
Aylmer, Ontario, Canada
N5H 2T2

Instructor: Brian Allen
Tel: 519-773-4258
Fax: 519-773-5762
E-mail: Brian.Allen@ontario.ca

May 13-17, 2013

Visualization of Latent Bloodstain Course
Loci Forensics B.V.
Flierveld 59
2151 LE Nieuw-Vennep
The Netherlands

Instructors: Martin Eversdijk and René Gelderman
Fax: +31(0)20-8907749
E-mail: Info@lociforensics.nl

June 17-21, 2013

The Fabrics of Bloodstain Pattern Course
Loci Forensics B.V.
Flierveld 59
2151 LE Nieuw-Vennep
The Netherlands

Instructors: Martin Eversdijk and René Gelderman
Fax: +31(0)20-8907749
E-mail: Info@lociforensics.nl

September 9-13, 2013

Advanced Bloodstain Pattern Analysis Course
Ontario Police College
10716 Hacienda Rd. Box 1190
Aylmer, Ontario, Canada
N5H 2T2

Instructor: Brian Allen
Tel: 519-773-4258
Fax: 519-773-5762
E-mail: Brian.Allen@ontario.ca

December 9-13, 2013

Basic Bloodstain Pattern Analysis Workshop
Specialized Training Unit
Miami-Dade Public Safety Training Unit
Doral, Florida

Contact: Toby L. Wolson, M.S., F-ABC
Miami-Dade Police Department
Forensic Services Bureau
9105 N.W. 25th Street
Doral, Florida 33172
Voice: 305-471-3041
Fax: 305-471-2052
E-mail: Twolson@mdpd.com

Articles and training announcements for the March 2013 issue of the Journal of Bloodstain Pattern Analysis must be received before February 30th, 2012

Editor's Corner

The highlight of this issue of our Journal is the publication of the abstracts of presentations, workshops and posters from the Fourth International IABPA conference recently held at the Royal College of Surgeons in Edinburgh, Scotland. There were 171 in attendance that represented eighteen countries including Belgium, Canada, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Italy, The Netherlands, Spain, Sweden, Switzerland, Taiwan, UK and the United States. On behalf of the IABPA membership, I thank the Director of the Scottish Police Services Authority (SPSA) Forensic Services Director, Tom Nelson, Conference Organizer, Amanda, A. Pirie and Scientific Program Coordinator, Chris Gannicliffe and their Organizing Committee for providing a most interesting and intellectually stimulating conference with excellent presentations of scientific papers and posters.

The venue of the Conference, the Royal College of Surgeons is in its 500th year of existence and is one of the establishments and organizations that represents Scotland's long-standing position at the forefront of medicine and science.

Highlights of the social events were the reception sponsored by the Lord Advocate, Frank Mulholland at the historical Edinburgh Castle and the Gala dinner and ceilidh held at the Ghillie Dhu that featured traditional Scottish music and dancing.

Stuart H. James
Editor
jamesforen@aol.com

The Journal of Bloodstain Pattern Analysis published quarterly in March, June, September, and December.

2013 IABPA TRAINING CONFERENCE

FOCUSING ON

THE SCIENCE BEHIND BLOODSTAIN PATTERN ANALYSIS

09/30/13 - 10/04/13 San Diego, California, USA

Crowne Plaza Hotel, Mission Valley, San Diego, California, USA

Check www. IABPA.org for current information

TWENTY'14

31 August - 4 September 2014

Adelaide Convention Centre

For further infomation
please contact:

All Occasion Management
T - +618 8125 2200
F - +618 8125 2233
E - anzfss@aomevents.com
www.anzfss2014.com.au

ADELAIDE TWENTY'14 | DETECT | DECIPHER | DELIVER
THE FUTURE OF EVIDENCE

Australian and New Zealand FORENSIC SCIENCE SOCIETY

ANZFSS 22nd International Symposium on the Forensic Sciences