

News and Clues

NEIAI Newsletter

Bridget, Mariana, and Kay at the IAI Conference. Please remember that NEIAI can award a \$500.00 scholarship to attend the IAI Conference.



**NEIAI 2010 Annual Conference**  
**April 6-7, 2010**

**Mahoney State Park**  
**Ashland, Nebraska**

**Key Speaker**  
**Pat Wertheim**

**Internationally Known Fingerprint Expert**



The NEIAI Web site can be found at  
[www.neiai.org](http://www.neiai.org).

There are numerous PowerPoint presentations and articles available at no charge.

Please visit the NEIAI WEB site for information on our Sponsors, Board of Directors, and Conference Details.

**Nebraska Division of the IAI 25<sup>th</sup> Annual  
Education Conference. April 7 and 8th,  
Mahoney State Park.**

**Conference Notes**

**by Mayde McGuire**

The first day started off with opening remarks by NE IAI President Robert Hurley.

LPD's Forensic Unit Manager, Erin Sims, began the training day and gave a great presentation on Blood Stain Pattern Analysis. Erin took over the Forensic Unit of the Lincoln Police Department in December of 2008. Prior to this, Erin was a Sergeant with LPD. She is a supervisor in the Crime Scene Unit and assists Sgt Larry Barksdale in teaching Advanced Crime Scene Analysis at Nebraska Wesleyan University. Her areas of expertise include Latent Fingerprint processes, Crime Scene Processing, and Blood Stain Analysis. She is also an instructor at the NE Law Enforcement Training Center. Erin was recognized as a Certified Bloodstain Pattern Examiner and Crime Scene Investigator through the International Association of Identification.

Dr. Patrick Besant-Matthews from Dallas Texas gave a presentation on Small Caliber and Shotgun Wound Exams. Dr. Besant-Matthews has a doctorate in medicine from the University of London and is a board Certified Forensic Pathologist. His experience includes Chief Medical Examiner in Seattle and Deputy Chief Medical Examiner in Dallas, TX. He has performed thousands of autopsies and specializes in the analysis of gunshot wounds and traumatic deaths. He is a member of the Evidence Photographers International Council and serves on its Board of Directors. He has written numerous papers on forensic photography and has contributed his work to several important textbooks. He was the recipient of the 1995 Achievement Award given by the International Association of Forensic Nurses for his ongoing contributions as an educator and mentor.

His presentation was very informative. It consisted of what needs to be evaluated and documented following an injury or death by use of a firearm. The three main items needed to be evaluated and documented are: (1) The range of fire, (2) The relative angular directions from/at which the bullet entered the body, and (3) Observations that provided information about the weapon and the ammunition or about any objects that the bullet may have passed through before striking the victim.

Dr. Patrick Besant-Matthews also spoke about locating and documenting entry and exit wounds. The determination of an entry or exit wound should depend solely on the basic characteristic of the wounds including size and not just the

size of the wound. The thought that the exit wound is always bigger than the entry wound is a myth. Also, preservation, examination and collection of the victim's clothing also cannot be emphasized enough and should be thought of as a priority in all gunshot cases.

On Wednesday, April 8<sup>th</sup>, 2009, Nebraska Attorney General Jon Bruning gave a speech for the Welcoming Ceremony. Attorney General Bruning gave a very pro- police speech and discussed the process of the Beatrice 6. The Attorney General recognized the importance of Crime Scene Investigators and the advancement of forensic technology in today's world.

Next on the agenda was a Case Study of a Serial Killer- the Anne True and Melissa Schmidt cases. This is the first known and documented serial killer case in Nebraska. The case was presented by Sgt. Jeff Bleimiester, Lancaster County Sheriff's Office, and Sgt. Luke Wilke, Lincoln Police Department. They gave a great recount of the steps it took to arrest the person responsible, Todd Baker, for the deaths.

Anne True's remains were located in Lancaster County near 40<sup>th</sup> and Arbor Rd on 9-29-1996 and were identified as Ann True on 10-15-1996 through dental records. Todd Baker was developed as a suspect through statements given by an ex-wife, Angela Hecox, in 2004. Todd Baker had since moved to Florida where he was living with his new wife. LSO deputies gathered enough evidence against Todd Baker to warrant a trip to Florida to be interviewed. During a pre-text monitored phone call between Todd and his wife, the deputies had enough probable cause to apply for an arrest warrant. Todd Baker was arrested for the murder of Anne True.

Melissa Schmidt was last seen on September 5, 1995 on the front porch of her residence in the area of 12<sup>th</sup> and D streets. Her remains were found in 2007 after an exhausting joint investigation directed by the Lancaster County Sheriff's Office.

Following the case study, Forensic Archaeologists Dr. Karl Reinhard and Dr. David Carter, both with the University of Nebraska- Lincoln, gave a presentation on processing the Schmidt bones. This presentation covered forensic archaeology, forensic palynology, and forensic taphonomy.

After lunch, Mr. John Beck, President of North American Search Dog Network gave a presentation on use of the canine in this case to find the bones of Melissa Schmidt.

Concluding the training session, Jason Linder with the Nebraska State Patrol Lab gave a DNA Evidence Update.

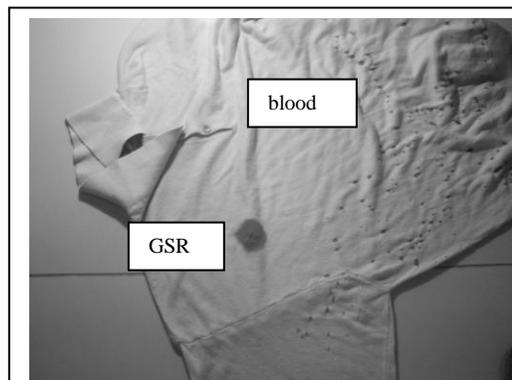
The NEIAI ended with the business meeting and election of new officers.

## Notes From the Editor

This is the first issue of the newsletter since I took over from Dr. David Carter, University of Nebraska, Forensic Science. As you have most likely noticed, I have very aptly fallen down on the job. I will try to fix that problem. Thank you to Dr. Carter for his years of service as the newsletter editor.

I recently read in the IAI "Identification News," Vol. 39, No. 5 OCT/NOV on page 15 that "SWGFAST acknowledges that errors do occur and furthermore that claims of zero error rate in the discipline are not scientifically plausible," On page 16 it says, referring to the Brandon Mayfield case, "The national and international fingerprint community has also addressed the error and has applauded the transparency demonstrated by the FBI as it analyzed the event." It seems to me that the forensic science community, particularly since the release of the NAS report has generally taken a position of being an apologist for mistakes. I propose in following newsletters to provide a series of short articles on error rates, methodology, ethics, transparency, and related subjects. I hope the newsletter will become a forum for discussion. Those involved in the Forensic Sciences cannot look at themselves as professionals until they rigorously police themselves.

-Larry Barksdale, Editor



Infrared Digital Image of bloodstains and GSR on a dark green shirt. It was taken with a Fuji IS-1 digital camera, handheld, sunlight, Lagos, Nigeria, forensic science students, bloodstain analysis training.

## A Basic Look at Error Bloodstain Analysis

I was recently at a bloodstain conference and one of the training exercises was to analyze complex patterns. See <http://www.iabpa.org/September%202009%20News.pdf> for additional information on that conference.

Seven complex patterns were presented to the attendees. None of the patterns were successfully analyzed to the point of being able to identify the mechanism and behavior that produced the patterns. I heard several speakers talk about 8 degree error rates in bloodstain analysis.

It set upon me that an understanding of error does not seem to be in the conceptualization of bloodstains as a technique. In essence, the complex patterns were a demonstration that error can be 100 percent. Error rates for bloodstain analyses are clearly 0% - 100%. How can this be, and how can bloodstain analyses be admitted into court? We can say, as food for thought that in the case of Brandon Mayfield the fingerprint analysis had an error rate of 100 percent! Watch for more in future newsletters.

-Larry Barksdale

**YOU ARE INVITED TO SUBMIT SHORT ARTICLES FOR PUBLICATION IN THE NEIAI NEWSLETTER. LONGER ARTICLES AND RESEARCH PUBLICATIONS CAN BE SUBMITTED FOR PUBLICATION ON THE NEIAI WEBSITE.**

## Cornhusker Chapter News

NEIAI members continue to contribute to the forensic science literature. The publication of new knowledge not only contributes to meeting the Daubert criteria, it shows that the NEIAI is making significant contributions to the field of forensic science. Some recent publications include:

Van Belle LE, Carter DO, Forbes SL (2009) Measurement of ninhydrin reactive nitrogen influx into gravesoil during aboveground and belowground carcass (*Sus domesticus*) decomposition. *Forensic Science International* 193:37-41.

Fujikawa A, Barksdale L, Carter DO (2009) *Calliphora vicina* (Diptera: Calliphoridae) and their ability to alter the morphology and presumptive chemistry of bloodstain patterns. *Journal of Forensic Identification* 59:502-512.

Carter DO, Filippi J, Higley LG, Huntington TE, Okoye MI, Scriven M, Bliemeister J (2009) Using ninhydrin to reconstruct a disturbed outdoor death scene. *Journal of Forensic Identification* 59:190-195.

Allison Sundeen (DCSO) received her International Association for Identification CSI Certification, Nov. 5 2009, and Angela Bonar (DCSO) was accepted into the NFSTC Latent Print Examiner Training Course. Congratulations to Allison and to Angela.

The image to the lower right is a bullet impression. Can you determine the angle of impact and the direction of travel of the bullet?



Dr. Karl Reinhard, Dr. Leon Higley, Dr. David Carter, and Larry Barksdale recently travelled to Lagos, Nigeria to teach forensic science classes to students at Lagos State University.