



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#1 Assessment and Interpretation of Toxicology in Neonatal, Pediatric, and Geriatric Deaths

Monday, February 22, 2010

8:30 a.m. - 12:30 p.m.

3.5 CE Hours

Educational Objectives: After attending this workshop, attendees will be able to: (1) define the terms “neonatal,” “pediatric,” and “geriatric,” and describe the uniqueness of these populations as they apply to the practice of toxicology; (2) describe the most commonly encountered substances in these populations; (3) explain how the pharmacokinetic profiles of drugs may be affected in these populations; and, (4) identify the factors that should be taken into account when evaluating toxicological findings in these types of cases.

Impact on the Forensic Science Community: This workshop will impact the forensic science community and mankind as a whole by improving the quality of the investigation of death in these two challenging populations.

Chair:

Barry K. Logan, PhD
NMS Labs
Willow Grove, PA

Co-Chair:

Laura M. Labay, PhD
NMS Labs
Willow Grove, PA

Faculty:

Walter I. Hofman, MD
Montgomery County Coroner’s Office
Norristown, PA

Dennis J. Wickham, MD
Clark County Office of the Medical Examiner
Vancouver, WA

Suzanne R. White, MD
Department of Emergency Medicine
Detroit, MI

Ruth E. Winecker, PhD
Office of the Chief Medical Examiner
Chapel Hill, NC

Program Description: This workshop will examine the special considerations that need to be taken into account in pediatric and geriatric populations when ordering tests and interpreting test results. Presentation topics will include pharmacokinetic and pharmacological idiosyncrasies of these populations, investigation of SIDS deaths, and appropriate scope of toxicological analysis.

Program:

8:30 a.m. - 8:40 a.m.	Welcome and Overview <i>Barry K. Logan, PhD</i>
8:40 a.m. - 9:10 a.m.	Brief Overview of the Pediatric and Geriatric Population <i>Laura M. Labay, PhD</i>
9:10 a.m. - 9:55 a.m.	Drugs Frequently Encountered in the Pediatric Population <i>Suzanne R. White, MD</i>
9:55 a.m. - 10:15 a.m.	Break
10:15 a.m. - 10:45 a.m.	Investigation and Certification of Sudden Unexpected Deaths in Infancy – Role of Toxicology <i>Dennis J. Wickham, MD</i>
10:45 a.m. - 11:30 a.m.	Drugs Frequently Encountered in the Geriatric Population <i>Suzanne R. White, MD</i>



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**#1 Assessment and Interpretation of Toxicology in Neonatal, Pediatric, and Geriatric Deaths
(continued)**

Program cont.

- 11:30 a.m. - 12:00 p.m. Investigation and Certification of Sudden Unexpected Deaths in the Elderly – Role of Toxicology
Walter I. Hofman, MD
- 12:00 p.m. - 12:30 p.m. Case Examples and Panel Discussion
Laura M. Labay, PhD; Ruth E. Winecker, PhD

Targeted Audience: General, Jurisprudence, Pathology/Biology, Psychiatry & Behavioral Science, Toxicology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 125 Pages



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#2 Tools for Controlling Cognitive Biases in Casework

Monday, February 22, 2010

8:30 a.m. - 12:30 p.m.

3.75 CE Hours

Educational Objectives: Upon completion of this workshop, the participants will be introduced to a logical framework for making casework decisions that control for cognitive biases and assist with making clear, useful, defensible, scientifically sound, and legally reliable decisions about the focus, priority and sequence of examinations, and what the results mean. This provides a means for laboratory work to meet the needs of the users and the needs of the courts and criminal justice system as a whole. These tools can be used by scientists in both the civil and criminal arenas to make decisions about casework, by laboratory management to make casework policy and allocate resources, by quality assurance officers to monitor controls for bias, and by attorneys and judges evaluating scientific work and making decisions about its use.

Impact on the Forensic Science Community: The role of the scientist in society is to provide information for other people to use in making decisions. The responsibility of the forensic laboratory is to provide the criminal justice system with good science applied to evidence in criminal or civil investigations: work that the users, the courts, and individuals accused of crimes or civil issues can be confident is useful, complete, and fair. The role of the forensic practitioner is to provide accurate, useful, and reliable scientific work on individual cases – work that can answer questions, withstand scrutiny, and address concerns raised by the NAS report. This presentation will impact the forensic science community by providing conceptual tools (i.e., reasoning tools) for the forensic practitioner and manager to use in making the everyday decisions upon which sound and defensible scientific information rests. A corollary focus is to provide attorneys and judges with reference points for evaluating the reliability of the information.

Chair:

Kerstin M. Gleim, BA
Cwiklik & Associates
Seattle, WA

Co-Chair:

Chesterene L. Cwiklik, BS
Cwiklik & Associates
Seattle, WA

Program Description: This half-day workshop is an introduction that addresses the steps between the receipt of a request for laboratory services and the beginning of testing. It also addresses the final steps when the forensic scientist must decide when the work is complete. Decisions made at the initial stage can control for cognitive bias and have a large impact on the final evaluation of evidence and the reliability of the final results. Hypothesis generation and testing flow from decisions about which items to examine, in what sequence to examine them, and which samples to collect for testing, and in turn affect decisions about when the work is complete. These decisions rely upon human interpretation (i.e., judgment).

This workshop will provide tools that the forensic practitioner can use in managing cognitive biases in the judgment part of casework. The approach emphasizes distilling information from the users of laboratory services (e.g., submitting agencies and attorneys) into scientifically testable questions that allow formation of multiple hypotheses at the outset and the formation of an analytical plan. Participants will apply these tools to case examples, making impact-based decisions early in the case; then as the case progresses, applying scientific reasoning to the case issues; and concluding work by evaluating the impact of results on the case hypotheses and determining whether the criterion of falsifiability (of interest to the courts) has been met. The principles are drawn from scientific practice and forensic literature and addresses concerns raised in the National Academy of Sciences report on the forensic sciences. The principles, based upon the scientific method, are presented as conceptual (reasoning) tools that are applied in a step-wise fashion to casework examples from criminalistics cases. Workshop participants will practice applying the tools in making casework judgments that are logical, minimize bias, can be documented, and rely upon scientific reasoning:

1. Multiple hypotheses at the outset to control for bias and lay the groundwork for final evaluation of results.
2. A framework for deciding which items to examine and when.
3. A framework for interpreting testing results based upon the weighing of hypotheses.
4. Reference points for knowing when you are done.
5. Having defensible work, records, conclusions, and testimony.



WORKSHOPS



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#2 Tools for Controlling Cognitive Biases in Casework (continued)

The presentation will consist of interwoven lectures, casework examples, and discussion exercises, applying conceptual tools to the casework examples.

Program:

8:30 a.m. - 9:00 a.m.	Introduction to the Types of Bias and the Scientific Method as a Control for Bias <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>
9:00 a.m. - 9:30 a.m.	Exercise – The Role of the Forensic Scientist in the Judicial System <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>
9:30 a.m. - 10:15 a.m.	Framing Case Questions – Sorting Exercises/Reasoning Tools <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>
10:15 a.m. - 10:30 a.m.	Break
10:30 a.m. - 10:45 a.m.	Translating Background Information Into Testable Questions: Know/Don't Know Levels of Information <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>
10:45 a.m. - 11:30 a.m.	Multiple Hypotheses – Listing Possibilities to Explain the Evidence <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>
11:30 a.m. - 12:30 p.m.	Evaluating the Hypotheses Using Test Results and Forming Conclusions by Narrowing Down Hypotheses – Significance of Findings <i>Kerstin M. Gleim, BA; Chesterene L. Cwiklik, BS</i>

Targeted Audience: Criminalistics, Engineering Sciences, General, Jurisprudence, Physical Anthropology

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 200 Pages

Restricted Audience Size: 50



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#3 The Recognition, Detection, and Significance of Gunshot Residues

Monday, February 22, 2010

8:30 a.m. - 5:00 p.m.

7.0 CE Hours

Educational Objectives: After attending this presentation, attendees will have a better understanding of the construction and function of firearms and ammunition, the mechanisms of gunshot residue formation and deposition, and the forensic methods employed for the detection and interpretation of gunshot residues.

Impact on the Forensic Science Community: This workshop will impact the forensic community by providing training on the methods used for the detection of gunshot residues and the significance of any findings.

Chair:

Vincent J. Desiderio, MS
New Jersey State Police
Hamilton, NJ

Co-Chair:

Peter J. Diaczuk, BS
John Jay College/CUNY
New York, NY

Faculty:

Michelle D. Miranda, MS
Suffolk County Medical Examiner's Office
Hauppauge, NY

Michael A. Trimpe, BS
Hamilton County Coroner's Office
Cincinnati, OH

Program Description: This full day workshop will discuss the various factors involved in detecting and interpreting gunshot residues. Special attention will be paid to the construction and function of firearms and ammunition and the forensic methods employed for this purpose.

Program:

8:30 a.m. - 9:00 a.m.	Introduction and Overview <i>Vincent J. Desiderio, MS</i>
9:00 a.m. - 10:00 a.m.	Introduction to Firearms and Ammunition: Nature, Terminology, and Construction <i>Peter J. Diaczuk, BS</i>
10:00 a.m. - 10:30 a.m.	Chemical Overview of Relevant Components <i>Vincent J. Desiderio, MS</i>
10:30 a.m. - 10:50 a.m.	Break
10:50 a.m. - 12:00 p.m.	History, Detection, and Significance of GSR on Shooter's Hands <i>Michael A. Trimpe, BS</i>
12:00 p.m. - 1:00 p.m.	Lunch
1:00 p.m. - 1:45 p.m.	Mechanism of Pattern Deposition, Visual and Microscopic Examination, and Documentation of Bullet Holes and GSR Patterns <i>Peter J. Diaczuk, BS; Vincent J. Desiderio, MS</i>
1:45 p.m. - 2:15 p.m.	Overview of Enhancement Techniques <i>Vincent J. Desiderio, MS</i>



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#3 The Recognition, Detection, and Significance of Gunshot Residues (continued)

Program cont.

- 2:15 p.m. - 3:00 p.m. Test Fire Considerations, Interpretation, and Significance of Results
Peter J. Diaczuk, BS; Vincent J. Desiderio, MS
- 3:00 p.m. - 3:15 p.m. Break
- 3:15 p.m. - 4:45 p.m. Practical Exercises and Demonstrations
Vincent J. Desiderio, MS; Peter J. Diaczuk, BS
- 4:45 p.m. - 5:00 p.m. Summation
Vincent J. Desiderio, MS; Peter J. Diaczuk, BS

Targeted Audience: Criminalistics, General

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 100 Pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#4 **Determining the Manner of Death in Equivocal Death Investigations: Homicide, Suicide, Accident, or Natural?**

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.25 CE Hours

Educational Objectives: After attending this presentation, attendees will better understand the importance of crime scene integrity, the management of the homicide investigations, and the processing of the homicide crime scene as well as the application of the medicolegal investigation specifically as it relates to cause and manner of death and the evaluation of the lethality of injuries and wounds.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by familiarizing forensic scientists and investigators in the art and science involved in death investigation.

Chair:

Vernon J. Geberth, MS

PHI Investigative Consultants, Inc.
Garnerville, NY

Co-Chair:

Barbara C. Wolf, MD

District 5 Medical Examiner's Office
Leesburg, FL

Faculty:

Mary I. Jumbelic, MD

Onondaga County Medical Examiner's Office
Syracuse, NY

Program Description: Upon completion of this workshop, the participants will have an understanding of the unique dynamics of equivocal death investigations and the application of professional homicide investigation and medicolegal analysis to these events.

Program:

8:30 a.m. - 10:30 a.m.	Introduction to Practical Homicide: The Preliminary Investigation at the Scene of Equivocal Deaths <i>Vernon J. Geberth, MS</i>
10:30 a.m. - 10:45 a.m.	Break
10:45 a.m. - 12:15 p.m.	Medicolegal Evaluation of Equivocal Deaths <i>Barbara C. Wolf, MD</i>
12:15 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 3:00 p.m.	Medicolegal Evaluation of Equivocal Death Investigation <i>Mary I. Jumbelic, MD</i>
3:00 p.m. - 3:15 p.m.	Break
3:15 p.m. - 5:15 p.m.	Major Equivocal Death Case Investigations <i>Vernon J. Geberth, MS; Mary I. Jumbelic, MD; Barbara C. Wolf, MD</i>
5:15 p.m. - 5:30 p.m.	Discussion <i>Vernon J. Geberth, MS; Mary I. Jumbelic, MD; Barbara C. Wolf, MD</i>

Targeted Audience: General, Pathology/Biology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 80 Pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#5 The Forensic Tools Utilized to Reconstruct Death Scenes

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.5 CE Hours

Educational Objectives: After attending this presentation, attendees will become familiar with methods and techniques involved in investigating and reconstructing multidisciplinary death scenes.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by enhancing tools and techniques used in a multidisciplinary approach to reconstructing a death scene.

Chair:

Julie A. Howe, MBA
Saint Louis University
St. Louis, MO

Co-Chair:

Paul E. Kish, MS
Forensic Consultant & Associates
Corning, NY

Faculty:

Mary E.S. Case, MD
Medical Examiner's Office
St. Louis, MO

Neal H. Haskell, PhD
Rensselaer, IN

Mary Fran Ernst, BLS
Saint Louis University Medical School
St. Louis, MO

Timothy M. Palmbach, JD
University of New Haven
West Haven, CT

Program Description: The reconstruction of a death scene is a complex problem which requires a multidisciplinary approach involving investigators as well as forensic scientists. A successful reconstruction requires cooperation between forensic disciplines with each knowing their respective roles in the reconstruction process. Reconstruction done properly is an applied science that can be conducted in a manner consistent with the scientific method. The body provides a wealth of pertinent information essential to determining much about the decedent and the events surrounding death. Those who possess the insight and skill to reconstruct life's last moments may ascertain an enormous amount of information from the decedent. A thorough, systematic inspection of the scene as well as the decedent assists all involved in the investigation and its outcome. The scene investigation is a primary source of information for medical examiners and coroners to determine cause and manner of death. Two of the more commonly encountered forms of forensic evidence associated with death scenes are bloodstains and the by-products of a discharged firearm(s). The critical examination of these two types of evidence can assist an investigator in determining the events surrounding a violent death. This workshop will demonstrate the forensic tools used to reconstruct death scenes, the thorough inspection of the decedent, methods of determining time of death and the difficulties therein, collection of pertinent information for the forensic pathologist to correctly determine cause and manner of death, as well as the reconstructing of death scenes with bloodstain pattern analysis and shooting incident reconstruction.

Program:

- 8:30 a.m. - 10:20 a.m. Role of the Medicolegal Death Investigator and Death Scene Investigation
Mary Fran Ernst, BLS
- 10:20 a.m. - 10:30 a.m. Break
- 10:30 a.m. - 11:30 a.m. Difficulty in Establishing Time of Death
Neal H. Haskell, PhD



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#5 The Forensic Tools Utilized to Reconstruct Death Scenes (continued)

Program cont.

11:30 a.m. - 12:30 p.m.	Role of Forensic Pathologist <i>Mary E.S. Case, MD</i>
12:30 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 3:15 p.m.	Bloodstain Pattern Analysis <i>Paul E. Kish, MS</i>
3:15 p.m. - 3:30 p.m.	Break
3:30 p.m. - 5:15 p.m.	Shooting Incident Reconstruction <i>Timothy M. Palmbach, JD</i>
5:15 p.m. - 5:30 p.m.	Questions and Discussion

Targeted Audience: Criminalistics, General, Jurisprudence, Pathology/Biology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 25 Pages



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Pre-Registration Required — \$200 w/registration; \$250 workshop only

#6 Forensic Applications of Raman Spectroscopy

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.5 CE Hours

Educational Objectives: Upon completion of this workshop, participants will have a better understanding of raman spectroscopy and a greater appreciation of the potential capabilities of this technique for the analysis of a variety of evidentiary materials.

Impact on the Forensic Science Community: Recent technological progress in developments of commercially available instruments, deeper research and applications in casework has rendered this method more attractive for forensic laboratories. The experience, knowledge, and related information presented in this workshop will impact the forensic science community by helping in the implementation of this technique in the laboratory setting.

Chair:

Patrick Buzzini, PhD
West Virginia University
Morgantown, WV

Chair:

Edward G. Bartick, PhD
Suffolk University
Boston, MA

Co-Chair:

Edward M. Suzuki, PhD
Washington State Patrol Crime Lab
Seattle, WA

Faculty:

John R. Lombardi, PhD
John Jay College/CUNY
New York, NY

Program Description: This workshop covers the different applications of raman spectroscopy for the examination of different types of substances frequently submitted for analysis to a forensic laboratory.

Program:

8:30 a.m. - 9:00 a.m.	Basic Photography for Forensics <i>Patrick Buzzini, PhD</i>
9:00 a.m. - 10:00 a.m.	Raman Spectroscopy & Criminalistics <i>Patrick Buzzini, PhD</i>
10:00 a.m. - 10:15 a.m.	Break
10:15 a.m. - 11:15 a.m.	The Complementarity Between Raman and Infrared Spectroscopic Methods and the Analysis of Automotive Paint <i>Edward M. Suzuki, PhD</i>
11:15 a.m. - 12:15 p.m.	The Raman Analysis of Explosives and Polymers <i>Edward G. Bartick, PhD</i>
12:15 p.m. - 1:15 p.m.	Lunch
1:15 p.m. - 3:00 p.m.	Introduction to SERS Techniques With Emphasis to the Analysis of Trace Evidence and Questioned Documents <i>John R. Lombardi, PhD</i>
3:00 p.m. - 3:15 p.m.	Break



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#6 Forensic Applications of Raman Spectroscopy (continued)

Program cont.

- 3:15 p.m. - 5:00 p.m. Demonstrations and Work Groups on Raman Spectroscopy Instruments
- 5:00 p.m. - 5:30 p.m. Discussion and Closing Remarks
Patrick Buzzini, PhD; Edward G. Bartick, PhD; Edward M. Suzuki, PhD; John R. Lombardi, PhD

Targeted Audience: Criminalistics, Questioned Documents

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 30 Pages

Restricted Audience Size: 30



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#7 **Signature Examination: Translating Basic Science to Practice**

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.25 CE Hours

Educational Objectives: The goal of this workshop is to provide attendees with an understanding of the neuroscience and motor control processes involved in the production of normal handwriting. Research in the effects of simulation, disguise, medication, disease, and aging on handwriting movement and signatures will be presented, and the attendees will have the opportunity to work on hands-on examples which may improve their ability to distinguish between various types of signature behavior.

Impact on the Forensic Science Community: This workshop will impact the forensic science community, specifically those in questioned documents, by providing attendees with information about the various process involved in handwriting and data that may enable more objective and quantitative decision-making and guide future research in forensic document examination.

Chair:

Peter V. Tytell, BA
Forensic Research
New York, NY

Co-Chair:

Karen S. Runyon, BA
Minneapolis, MN

Faculty:

Michael Caligiuri, PhD
University of California San Diego
San Diego, CA

Linton Mohammed, MFS
San Diego County Sheriff Crime Lab
San Diego, CA

Program Description: This workshop comprises theoretical and practical components. It gives an overview of motor control systems in handwriting and explores recent kinematic studies in signatures. The workshop will provide information on the effects of medication, illness, and aging on handwriting.

Program:

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| 8:30 a.m. - 9:30 a.m. | Neuroanatomy and Neurophysiology of Handwriting Movements
<i>Michael Caligiuri, PhD</i> |
| 9:30 a.m. - 10:30 a.m. | Motor Control of Handwriting and Signatures
<i>Michael Caligiuri, PhD</i> |
| 10:30 a.m. - 10:50 a.m. | Break |
| 10:50 a.m. - 12:30 p.m. | Current Research Studies in Signature Examination
<i>Linton Mohammed, MFS</i> |
| 12:30 p.m. - 1:30 p.m. | Lunch |
| 1:30 p.m. - 3:30 p.m. | Hands-on exercises in signature examination
<i>Linton Mohammed, MFS</i> |
| 3:30 p.m. - 3:50 p.m. | Break |
| 3:50 p.m. - 5:15 p.m. | Effects of Disease, Medication, and Aging on Handwriting
<i>Michael Caligiuri, PhD</i> |



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#7 Signature Examination: Translating Basic Science to Practice (continued)

Program cont.

5:15 p.m. - 5:30 p.m. General Discussion

Targeted Audience: Questioned Documents

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 50 Pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#8 Forensic Multimedia Analysis

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.0 CE Hours

Educational Objectives: After attending this workshop, attendees will understand the possibilities and limitations of forensic multimedia analysis.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing an overview of tools in forensic multimedia analysis, including an overview of state-of-the art tools and techniques. It will reference the National Academy of Sciences report and how they can be implemented.

Chair:

Zeno J. Geradts, PhD
Netherlands Forensic Institute
Den Haag, Netherlands

Co-Chair:

Richard W. Vorder Bruegge, PhD
Federal Bureau of Investigation
Quantico, VA

Co-Chair:

Nicole A. Spaun, PhD
Federal Bureau of Investigation
Quantico, VA

Faculty:

Ivo Alberink, PhD
Netherlands Forensic Institute
Den Haag, Netherlands

Bart Hoogeboom, MS
Netherlands Forensic Institute
Den Haag, Netherlands

Jurrien Bijhold, PhD
Netherlands Forensic Institute
Den Haag, Netherlands

William R. Oliver, MD
Georgia Bureau of Investigation
Trion, GA

Program Description: This workshop on forensic image and video analysis covers the broad field of investigations, from camera comparison, to image enhancement, length measurement, 3D-model, facial comparison, and imaging in pathology. For some parts of the workshop, it is advised to bring a laptop with you for the hands-on experience.

Program:

- 8:30 a.m. - 9:15 a.m. Introduction
Zeno J. Geradts, PhD
- 9:15 a.m. - 10:00 a.m. Detection of Manipulated Images
Richard W. Vorder Bruegge, PhD
- 10:00 a.m. - 10:30 a.m. Break
- 10:30 a.m. - 11:00 a.m. Length Measurements and Statistics
Ivo Alberink, PhD
- 11:00 a.m. - 11:30 a.m. Grid Techniques
Nicole A. Spaun, PhD
- 11:30 a.m. - 12:00 p.m. Hands on Grid Techniques
Nicole A. Spaun, PhD
- 12:00 p.m. - 1:00 p.m. Lunch



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#8 Forensic Multimedia Analysis (continued)

Program cont.

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| 1:00 p.m. - 1:30 p.m. | Identifying Images From Cameras
<i>Zeno J. Geradts, PhD</i> |
| 1:30 p.m. - 2:00 p.m. | Hands-on Using Software for Image Comparison
<i>Zeno J. Geradts, PhD</i> |
| 2:00 p.m. - 2:30 p.m. | Analysis of Damaged Files
<i>Zeno J. Geradts, PhD</i> |
| 2:30 p.m. - 3:15 p.m. | Comparison of Objects in Images
<i>Jurrien Bijhold, PhD</i> |
| 3:15 p.m. - 3:45 p.m. | Break |
| 3:45 p.m. - 4:30 p.m. | 3D – Techniques
<i>Bart Hoogeboom, MS; Jurrien Bijhold, PhD</i> |
| 4:30 p.m. - 5:15 p.m. | Medical Imaging
<i>William R. Oliver, MD</i> |
| 5:15 p.m. - 5:30 p.m. | Closing
<i>Zeno J. Geradts, PhD</i> |

Targeted Audience: Criminalistics, Digital & Multimedia Sciences, Engineering Sciences, General, Jurisprudence, Pathology/Biology, Questioned Documents

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 100 Pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#9 Advances in Forensic DNA Analysis

Monday, February 22, 2010

8:30 a.m. - 5:30 p.m.

7.0 CE Hours

Educational Objectives: After attending this presentation, attendees will learn principles and applications of new and emerging forensic DNA technologies and applications in forensic casework.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing a forum for review and in depth discussion of several new and emerging technologies like DNA repair, ancient DNA typing, SNP typing, and statistical challenges of combining multiple genetic markers for the analysis of challenging samples in trace DNA analysis. The attendees will also learn more about new and emerging forensic technologies including biometrics. New powerful and reliable forensic DNA methods being discussed may revolutionize the application of DNA to forensic science.

Chair:

Steven B. Lee, PhD
San Jose State University
San Jose, CA

Co-Chair:

Jaiprakash G. Shewale, PhD
Life Technologies
Foster City, CA

Faculty:

Charles H. Brenner, PhD
Oakland, CA

Michael D. Coble, PhD
Armed Forces Medical Examiner's
Office
Rockville, MD

Nader Pourmand, PhD
University of California Santa Cruz
Santa Cruz, CA

Bruce Budowle, PhD
University of North Texas
Heath Science Center
Fort Worth, TX

Cecelia A. Crouse, PhD
Palm Beach Sheriff's Crime Lab
West Palm Beach, FL

Peter M. Vallone, PhD
National Institute of Standards and
Technology
Gaithersburg, MD

Ranjit Chakraborty, PhD
University of Cincinnati
Cincinnati, OH

Arthur J. Eisenberg, PhD
University of North Texas
Health Science Center
Fort Worth, TX

Program Description: The use and application of molecular tools in forensic science is now well established. Recent research has led to new applications that are currently being evaluated and tested for their utility in helping to resolve cases in the justice system. New and emerging forensic DNA technologies and applications will be reviewed and discussed in this workshop. The workshop will cover topics such as: (1) Trace DNA - Low Copy templates and DNA repair; (2) new developments in DNA profiling of challenged samples; (3) novel methods for DNA storage/preservation; (4) utility of SNPs in missing persons and complex paternity cases; (5) advances and new technologies in forensic DNA; (6) DNA as a potential biometric tool; (7) statistical challenges in combining the results from autosomal STRs, Y-STRs, SNPs, and mtDNA typing; and (8) new directions in forensic mathematics – understanding the evidential strength of rare haplotype evidence.

Program:

8:30 a.m. - 8:45 a.m. Opening Remarks
Steven B. Lee, PhD

8:45 a.m. - 9:30 a.m. Trace DNA: Low Copy and Low Quality Templates, Novel Approaches, DNA Repair Enzymes
and Their Utility in Forensics
Bruce Budowle, PhD



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#9 Advances in Forensic DNA Analysis (continued)

Program cont.

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| 9:30 a.m. - 10:15 a.m. | New Developments in DNA Profiling of Challenged Samples
<i>Michael D. Coble, PhD</i> |
| 10:15 a.m. - 10:30 a.m. | Break |
| 10:30 a.m. - 11:15 a.m. | Novel Methods For DNA Storage/Preservation
<i>Cecelia A. Crouse, PhD</i> |
| 11:15 a.m. - 12:00 p.m. | Advances and New Technologies in Forensic DNA
<i>Nader Pourmand, PhD</i> |
| 12:00 p.m. - 1:15 p.m. | Lunch |
| 1:15 p.m. - 2:00 p.m. | Utility of SNPs in Missing Persons and Complex Paternity Cases
<i>Arthur J. Eisenberg, PhD</i> |
| 2:00 p.m. - 2:45 p.m. | DNA as a Potential Biometric Tool
<i>Peter M. Vallone, PhD</i> |
| 2:45 p.m. - 3:00 p.m. | Break |
| 3:00 p.m. - 3:45 p.m. | Statistical Challenges in Combining the Results From Autosomal STRs, Y-STRs, SNPs, and mtDNA Typing
<i>Ranajit Chakraborty, PhD</i> |
| 3:45 p.m. - 4:30 p.m. | New Directions in Forensic Mathematics – Understanding the Evidential Strength of Rare Haplotype Evidence
<i>Charles H. Brenner, PhD</i> |
| 4:30 p.m. - 5:15 p.m. | Panel Discussion |
| 5:15 p.m. - 5:30 p.m. | Closing Remarks
<i>Jaiprakash G. Shewale, PhD</i> |

Targeted Audience: Criminalistics, Pathology/Biology, Physical Anthropology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 100 Pages

Restricted Audience Size: 100



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#10 Taphonomy of Bone Destruction: Information Lost, Information Gained

Monday, February 22, 2010

8:30 p.m. - 5:30 p.m.

7.0CE Hours

Educational Objectives: After attending this workshop, attendees will learn about the full spectrum of natural and artificial alterations common to bone in forensic settings, the signatures of taphonomic processes, and the higher-order taphonomic syndromes to which they can be attributed. The workshop includes hands-on presentations of taphonomic examples.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing common language and basic understanding of taphonomic processes (the study of an organism's changes from its death onwards) and the imprints that they leave upon bones is necessary to forensic anthropological investigations. These processes are structured into three major categories of:

1. Differentiation between deliberate human interaction including perimortem traumas, natural postmortem alterations.
2. Contextualization of remains, indicating what environments and agencies influenced the remains.
3. Estimation of postmortem interval.

While information is lost through these alterations, knowledge is gained through accurate analysis and interpretation of imprinting upon osseous remains concerning the causal agencies involved.

Chair:

James T. Pokines, PhD
JPAC CIL
Hickam AFB, HI

Co-Chair:

Steven A. Symes, PhD
Mercyhurst College
Erie, PA

Faculty:

Mark O. Beary, MS
Columbia, MO

Miranda M. Jans, PhD
Vrije Universiteit
Amsterdam, Netherlands

Allison M. Nesbitt, BA
Mercyhurst College
Erie, PA

Elizabeth S. Daly, BA
Mercyhurst College
Erie, PA

Alexandra R. Klales, MS
Mercyhurst College
Erie, PA

Josephine M. Paoello, MS
JPAC CIL
Hickam AFB, HI

Alexis R. Dzubak, BS
Mercyhurst College
Erie, PA

Murray K. Marks, PhD
University of Tennessee
Knoxville, TN

Program Description: This workshop provides lectures on and practical demonstrations in forensic osteological taphonomy. The topics covered include histological analysis of microscopic bone destruction; characteristic signatures of natural processes including burial, surface deposition, and water transport; the effects of animal gnawing and dispersal of bone; artificial alterations including ritual, anatomical, and curational; indicators of postmortem interval including weathering; and indicators of perimortem vs. postmortem timing, including thermal alteration, fracture, and other types of bone trauma.

Program:

- | | |
|-----------------------|--|
| 8:30 a.m. - 9:00 a.m. | Introduction: Toward a Compendium of Taphonomic States
<i>James T. Pokins, PhD</i> |
| 9:00 a.m. - 9:40 a.m. | Contextual Information: Microscopic Destruction of Bone
<i>Miranda M. Jans, PhD</i> |



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#10 Taphonomy of Bone Destruction: Information Lost, Information Gained (continued)

Program cont.

9:40 a.m. - 10:05 a.m.	Contextual Information: Natural Alterations Part I – Burial vs. Surface Deposition <i>Elizabeth S. Daly, BA</i>
10:05 a.m. - 10:30 a.m.	Contextual Information: Natural Alterations Part II – Water Deposition <i>Allison M. Nesbitt, BA</i>
10:30 a.m. - 10:50 a.m.	Break
10:50 a.m. - 11:20 a.m.	Contextual Information: Artifactual, Ritual, and Trophy <i>Josephine M. Paoello, MS; Alexandra R. Klales, MS</i>
11:20 a.m. - 12:05 p.m.	Contextual Information: Gnawing Damage to Bone <i>James T. Pokines, PhD</i>
12:05 p.m. - 1:25 p.m.	Lunch
1:25 p.m. - 2:10 p.m.	Temporal Information: Bone Weathering <i>Mark O. Beary, MS</i>
2:10 p.m. - 2:40 p.m.	Temporal Information: General Indicators of Postmortem Interval – Prehistoric/Historic/Modern <i>Alexis R. Dzubak, BS</i>
2:40 p.m. - 3:25 p.m.	Temporal Information: Postmortem Interval, Decomposition, and Skeletonization <i>Murray K. Marks, PhD</i>
3:25 p.m. - 3:45 p.m.	Break
3:45 p.m. - 4:00 p.m.	Perimortem vs. Postmortem Part I – Trauma and Pseudotrauma <i>Steven A. Symes, PhD</i>
4:00 p.m. - 4:30 p.m.	Perimortem vs. Postmortem Part II – Thermal Alteration to Bone <i>Steven A. Symes, PhD</i>
4:30 p.m. - 5:00 p.m.	Perimortem vs. Postmortem Part III – Bone Fracture <i>Steven A. Symes, PhD</i>
5:00 p.m. - 5:30 p.m.	Discussion/Specimen Exhibits <i>James T. Pokines, PhD; Steven A. Symes, PhD</i>

Targeted Audience: General, Odontology, Pathology/Biology, Physical Anthropology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 100 Pages

Restricted Audience Size: 50



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#11 Investigation of Deaths in Custody – Evolution of Police Practices and Medical Examiner Methods

Monday, February 22, 2010

1:00 p.m. - 5:00 p.m.

3.75 CE Hours

Educational Objectives: The goal of this workshop is to review the medicolegal investigation of deaths in custody, including those occurring during pursuit, subdual, and incarceration of offenders. Using a decade of cases to illustrate changes that have occurred as police practices have required alteration following media outcry and family lawsuits, this workshop will illustrate how medicolegal investigation may be updated to follow suit. Additional goals include review of the current state of knowledge of the role of less lethal weapons, including conducted energy weapons, and excited delirium, in deaths during subdual; and discussion of medicolegal death investigator responsibilities and relationships with police during police-involved deaths.

Impact on the Forensic Science Community: This presentation will impact the forensic community by analyzing the nature of deaths in custody using a case-study format, discussing the principles behind investigation of each major category of death in order to answer the five questions the family will ask and the six questions the medical examiner/investigator must ask, while reviewing past and recent case histories to learn from the lessons of the past. Attendees will gain insight into ways in which updated death investigation techniques, for both medical examiners and medicolegal death investigators, can keep pace with changes in police practices.

Chair:

Jeffery J. Gofton, MD
Medical Examiner's Office
Norfolk, VA

Co-Chair:

Wendy M. Gunther, MD
Medical Examiner's Office
Norfolk, VA

Faculty:

Donald R. Norrell, BA
Medical Examiner's Office
Norfolk, VA

William R. Oliver, MD
Georgia Bureau of Investigation
Trion, GA

Program Description: After a brief introduction which includes a pre-test to assess the attendee's current state of knowledge, the workshop begins with a discussion of the five questions the family will ask about a death in police custody, and the six questions the medical examiner and medicolegal death investigator must ask. These questions are then put to use in case studies covering deaths during pursuit, subdual, and incarceration. Cases covered in the section on deaths during police pursuit include motor vehicle crashes and other accidental deaths while fleeing from police, suicide by perpetrator while fleeing, "suicide by cop", and a police shooting in a SWAT team situations. Discussion of investigation of these deaths involves analysis of the relationship between medicolegal death investigators, who are often ex-officers, with police. Judicial outcomes and changes in police policy are discussed. Cases covered in the workshop include discussion on deaths during subdual including restraint asphyxia with a scene re-enactment, deaths involving ingestion of drugs by the perpetrator, deaths following less lethal weapons such as pepper spray or conducted energy weapons (CEWs), deaths following CEW use and excited delirium, jailhouse hanging and unexpected natural deaths, and judicial outcomes and changes in custodial policy. The presentations are followed by a summary and a post-test.

Program:

- | | |
|-----------------------|--|
| 1:00 p.m. - 1:30 p.m. | Introduction – Pre-Test
<i>Jeffery J. Gofton, MD</i> |
| 1:30 p.m. - 2:30 p.m. | Deaths During Pursuit – Case Studies, Discussion of Medicolegal Death Investigator Relationship With Police
<i>Jeffery J. Gofton, MD; Wendy M. Gunther, MD; Donald R. Norrell, BA</i> |
| 2:30 p.m. - 2:45 p.m. | Break |



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#11 Investigation of Deaths in Custody – Evolution of Police Practices and Medical Examiner Methods (continued)

Program cont.

- 2:45 p.m. - 3:30 p.m. Deaths During Subdual – Case Studies, Scene Re-Enactment, Discussion of Deaths From Excited Delirium, and Deaths Following Less Lethal Weapons
Jeffery J. Gofton, MD; Wendy M. Gunther, MD; William R. Oliver, MD; Donald R. Norrell, BA
- 3:30 p.m. - 4:30 p.m. Deaths During Incarceration (Case Studies)
Jeffery J. Gofton, MD; Wendy M. Gunther, MD; Donald R. Norrell, BA
- 4:30 p.m. - 5:00 p.m. Summary and Post-Test
Jeffery J. Gofton, MD

Targeted Audience: Criminalistics, Pathology/Biology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 10 Pages



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#12 Attorneys and Scientists in the Courtroom: Bridging the Gap

Monday, February 22, 2010

1:00 p.m. - 6:00 p.m.

4.75 CE Hours

Educational Objectives: After attending this workshop, attendees will be presented a basis for improved communication between legal and scientific professionals, will better understand the substantive issues facing each in the context of the criminal justice system, and gain common knowledge based framework within which each can operate.

Impact on the Forensic Science Community: This workshop will impact the forensic science community by minimizing the negative impacts to the criminal justice system created by the cultural gap between legal and scientific professionals and to maximize the benefits to be gained from the utilization of forensic science by fostering understanding and communication.

Chair:

Max M. Houck, MA
West Virginia University
Morgantown, WV

Co-Chair:

Ted W. Vosk, JD
Bothell, WA

Faculty:

Ashley Emery, PhD
University of Washington
Seattle, WA

Program Description: This workshop will examine the distinct professional cultures of forensic scientists and attorneys, their practical and philosophical differences, how these differences negatively impact the criminal justice system and how both professions can bridge the gulf between them.

Program:

1:00 p.m. - 2:30 p.m.	Cultural Distinctions Between Attorney and Scientist <i>Max M. Houck, MA</i>
2:30 p.m. - 2:45 p.m.	Break
2:45 p.m. - 4:00 p.m.	Metrology: A Knowledge Base for Communication and Understanding <i>Ted W. Vosk, JD</i>
4:00 p.m. - 5:00 p.m.	Metrological Uncertainty: The Rigorous Made Accessible <i>Ashley Emery, PhD</i>

Targeted Audience: Criminalistics, General, Jurisprudence, Toxicology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 150 Pages



WORKSHOPS



Pre-Registration Required — \$125 w/registration; \$150 workshop only

#13 Forensic Comparison in a Digital World

Tuesday, February 23, 2010

8:30 a.m. - 12:30 p.m.

3.75 CE Hours

Educational Objectives: After attending this workshop, attendees will be aware of the nuances and workflow barriers that face forensic laboratory personnel while employing a variety of digital media at the center of their comparative operations. Most comparative analysis sections continue to use traditional comparison processes employing combinations of various media to arrive at probative comparison conclusions. This workshop will introduce attendees to a new technology that facilitates secure image work flow and addresses these problems. This advanced technology can now provide forensic scientists with the tools to make the transition to a Network Based Comparison Workflow.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by serving as a reference for those forensic odontologists, fingerprint examiners, tool mark analysts, and other experts who may be requested to provide comparison testimony, demonstrating a workflow that is both scientific and documentable. Furthermore, it will allow the participant to familiarize themselves with the system by using pre-supplied odontologic, fingerprint, and tool mark data.

Chair:

David K. Ord, DDS
University of Las Vegas
Las Vegas, NV

Co-Chair:

Steve Scarborough, BS
Las Vegas, NV

Faculty:

Steven Dowell, BS
Los Angeles County Department of Coroner
Los Angeles, CA

Edward E. Herschaft, DDS
University of Las Vegas
Las Vegas, NV

Program Description: This program interweaves the fields of fingerprints, odontology, and tool marks in developing an electronic workflow using Mideo Systems' CASEWORKSeis software. Presentations will be made in each of the fields followed by a hands-on experience in using the software in case development.

Program:

- 8:30 a.m. - 8:45 a.m. Introduction
Edward E. Herschaft, DDS
- 8:45 a.m. - 9:15 a.m. Fingerprint Workflow
Steve Scarborough, BS
- 9:15 a.m. - 9:45 a.m. Odontology Workflow
David K. Ord, DDS
- 9:45 a.m. - 10:00 a.m. Break
- 10:00 a.m. - 10:30 a.m. Tool Mark Workflow
David K. Ord, DDS
- 10:30 a.m. - 12:30 p.m. Hands-On Software Training

Targeted Audience: Criminalistics, Odontology, Physical Anthropology, Questioned Documents

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 30 Pages

Restricted Audience Size: 24



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#14 Assessing Issues of Handwriting Authorship in the Changing Paradigm of the Identification Sciences

Tuesday, February 23, 2010

8:30 a.m. - 12:00 p.m.

3.75 CE Hours

Educational Objectives: After attending this workshop, participants will have the scientific criticisms of handwriting identification summarized according to the themes of the deficiencies that have been outlined in literature. Comparisons will be made between the approach of handwriting examiners to casework and traditional scientific approaches that are made in typical analyses. Divergent aspects of the approach will be outlined along with suggestions as to how practices may be modified to put the work of Forensic Document Examiners (FDEs) on more scientific footings. Aspects of the discussion will include context blinding, structuring casework submission, the introduction of multiple specimen writers, addressing alternative propositions, and structuring opinions in reports.

Impact on the Forensic Science Community: Forensic handwriting identification was considered one of the most established of the forensic science disciplines. As an elder of the forensic sciences, its continued judicial acceptance rather than its rigorous scientific footings has underpinned its validity in many countries throughout the world. Recent academic and legal criticism provides FDEs with a rich source of information on which to reassess traditional theoretical constructs and routine casework practices. This workshop will impact the forensic science community by providing a conduit through which FDEs may wish to change the approach they take in terms of the structure of cases, the theories that are employed, proficiency test development and reporting procedures. Changes such as those suggested may enable this discipline, over time, to align itself more closely with accepted scientific paradigms. This should provide the judiciary with a more reliable and balanced form of 'identification' evidence through handwriting comparisons.

Chair:

Linton Mohammed, MFS
San Diego County Sheriff Crime Lab
San Diego, CA

Co-Chair:

Karen S. Runyon, BA
Minneapolis, MN

Faculty:

Bryan Found, PhD
La Trobe University
Melbourne, Australia

Program Description: This program is presented in the hope that this interesting and practical sub discipline of the behavioral sciences might continue to be accepted as a valid pursuit in the forensic arena.

Program:

8:30 a.m. - 9:30 a.m.	Criticisms of Handwriting Examination <i>Bryan Found, PhD</i>
9:30 a.m. - 10:30 a.m.	Handwriting Examination and the Scientific Method <i>Bryan Found, PhD</i>
10:30 a.m. - 10:45 a.m.	Break
10:45 a.m. - 12:15 p.m.	Context Blinding, Alternative Propositions, and Structuring Opinions <i>Bryan Found, PhD</i>
12:15 p.m. - 12:30 p.m.	Discussion

Targeted Audience: Questioned Documents

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 50 Pages



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#15 Chemometrics for Forensic Scientists: The Good, the Bad, and the Misleading

Tuesday, February 23, 2010

8:30 a.m. - 12:30 p.m.

3.75 CE Hours

Educational Objectives: The goal of this workshop is to acquaint attendees with the application of Chemometrics (advanced statistical techniques applied to analytical data) in forensic applications especially those involving large data sets derived from GC/MS, GCxGC, LC/MS, ICP/MS and similar techniques of complex mixtures where pattern matching is used to identify or match two samples (fire debris, micro spectral analysis, etc). After completing this workshop, the attendees will know the basic theory of principal components analysis (PCA), cluster analysis, and other techniques; how and when to apply them to forensic data; and what commercial and non-commercial statistical packages are best for forensic applications.

Impact on the Forensic Science Community: With the recent NAS report and other court challenges to expert testimony about determination of “match” or “consistent” between two or more samples of physical evidence, a determination of statistical probability of a random match is now being required for such determinations. Advance statistical techniques used in Chemometrics combined with large datasets can aid in that determination. There are a number of different commercial packages available, each with a number of “features” that may not be appropriate for a particular application. In particular, some packages automatically perform “pre-treatments” to the data may be appropriate to spectral data, but not for chromatographic data. Further, different packages determine “statistical distance” (and by extension, statistical probability of a random match) by different algorithms which may lead to different results. A better understanding of how and when these techniques should be used will impact the forensic science community by enabling the criminalists to explain their results in court.

Chair:

J. Graham Rankin, PhD
Marshall University
Huntington, WV

Co-Chair:

John V. Goodpaster, PhD
Indiana University Purdue University Indianapolis
Indianapolis, IN

Faculty:

Peter de B. Harrington, PhD
Ohio University
Athens, OH

Stephen L. Morgan, PhD
University of South Carolina
Columbia, SC

Program Description: This workshop will give an overview of chemometric techniques and software available which is being increasingly used by forensic scientists for doing comparison of physical evidence. Proper selection of techniques and especially pre-treatments of data are key to correct interpretation of the results.

Program:

8:30 a.m. - 9:30 a.m.	Chemometrics 101: Theory and Practice <i>Stephen L. Morgan, PhD</i>
9:30 a.m. - 10:30 a.m.	Data Pretreatment: Make It Help and Not Hinder the Analysis <i>Peter de B. Harrington, PhD</i>
10:30 a.m. - 10:45 a.m.	Break
10:45 a.m. - 11:15 a.m.	Chemometric Analysis of Data From Microspectrophotometers <i>John V. Goodpaster, PhD</i>
11:15 a.m. - 11:45 a.m.	Application of PCA and Cluster Analysis to Gasoline GC/MS Pattern Matching <i>J. Graham Rankin, PhD</i>



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#15 Chemometrics for Forensic Scientists: The Good, the Bad, and the Misleading (continued)

Program cont.

11:45 a.m. - 12:30 p.m. Panel Discussion
*Stephen L. Morgan, PhD; Peter de B. Harrington, PhD; John V. Goodpaster, PhD;
J. Graham Rankin, PhD*

Targeted Audience: Criminalistics

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 40 pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#16 Introduction to Perception, Observer Effects, Bias, and Expectation in Forensic Science

Tuesday, February 23, 2010

8:30 a.m. - 4:15 p.m.

6.25 CE Hours

Educational Objectives: Upon completion of this workshop, participants will better understand how the brain processes information, and particularly the type of information used and generated in forensic science. Attendees will be able to define the terms that are key to understanding how and when bias occurs; will understand the scientific philosophical foundation and practical applications of sequential unmasking; and will participate in a series of exercises that demonstrates the need for procedures that minimize the impact of domain irrelevant information when making decisions and inferences about physical evidence.

Impact on the Forensic Science Community: The presentations will impact the forensic science community by demonstrating the need for improved procedural safeguards against bias in the examination of physical evidence, which in turn will lead to more objective evaluations and properly limited inferences in reporting results to the criminal justice community.

Chair:

Keith E. Inman, BS
Department of Criminal Justice
Administration
Hayward, CA

Chair:

John J. Lentini, BA
Scientific Fire Analysis, LLC
Big Pine Key, FL

Co-Chair:

Norah Rudin, PhD
Forensic DNA Consultant
Mountain View, CA

Faculty:

Michael Risinger, JD
Seton Hall University
Newark, NJ

Program Description: This workshop will begin to address the need identified by the NAS Report by introducing participants to the concepts of cognitive psychology, how the brain works, the vocabulary of perception, bias and expectation, and the application of these concepts to forensic casework. In addition, workshop participants will engage in a variety of exercises that will further clarify bias and expectation, and how these may interfere with objective processing of data, including the processing of crime scene information and analytical results.

Program:

8:30 a.m. - 8:45 a.m.	Introduction <i>Keith E. Inman, BS</i>
8:45 a.m. - 10:00 a.m.	Group Exercise - Case Scenario Exercises <i>Keith E. Inman, BS; John J. Lentini, BA; Norah Rudin, PhD; Michael Risinger, JD</i>
10:00 a.m. - 10:15 a.m.	Group Presentations
10:15 a.m. - 10:30 a.m.	Break
10:30 a.m. - 11:30 a.m.	How the Cognitive Brain Works <i>Keith E. Inman, BS</i>
11:30 a.m. - 12:00 p.m.	Definition of Terms Relevant to Forensic Science <i>Michael Risinger, JD</i>
12:00 p.m. - 1:00 p.m.	Lunch



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#16 Introduction to Perception, Observer Effects, Bias, and Expectation in Forensic Science (continued)

Program cont.

- 1:00 p.m. - 1:30 p.m. Introduction to Sequential Unmasking in Forensic Science – A Scientific Philosophical Foundation
Keith E. Inman, BS
- 1:30 p.m. - 2:00 p.m. Recognizing the Fragility of Our Perceptions - Exercises of Our Hard-Wired and Sub-Conscious Biases
Keith E. Inman, BS; John J. Lentini, BA; Norah Rudin, PhD; Michael Risinger, JD
- 2:00 p.m. - 2:30 p.m. Review of Morning Exercise
Keith E. Inman, BS; John J. Lentini, BA; Norah Rudin, PhD; Michael Risinger, JD
- 2:30 p.m. - 2:45 p.m. Break
- 2:45 p.m. - 3:15 p.m. Sequential Unmasking in DNA Analysis
Nora Rudin, PhD
- 3:15 p.m. - 4:00 p.m. Sequential Unmasking in Arson Investigation
John J. Lentini, BA
- 4:00 p.m. - 4:15 p.m. Questions and Answers
Keith E. Inman, BS; John J. Lentini, BA; Norah Rudin, PhD; Michael Risinger, JD

Targeted Audience: Criminalistics, General, Jurisprudence, Odontology, Pathology/Biology, Physical Anthropology, Questioned Documents

Knowledge Level Required: Advanced (Highly Technical)

Expected Handout Length: 100 Pages

Restricted Audience Size: 25



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#17 Fires and Explosions: A Multidisciplinary Overview of Investigative Methods, Mental States of Perpetrators, and Psychological Trauma to Victims

Tuesday, February 23, 2010

8:30 a.m. - 4:30 p.m.

6.0 CE Hours

Educational Objectives: Upon completion of this workshop, attendees will obtain a broad, multidisciplinary understanding of various methods of investigating fires and explosions as well as of the psychology of perpetrators and victims.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by better informing attendees about methods of various disciplines in investigating fire and explosions, motivation and mental states associated with setting fires and bombs, and patterns of psychopathology experienced by surviving victims.

Chair:

Alan R. Felthous, MD
Saint Louis University
St. Louis, MO

Co-Chair:

Robert Weinstock, MD
Los Angeles, CA

Faculty:

Douglas J. Carpenter, MS
Combustion Science & Engineering, Inc.
Columbia, MD

Daniel A. Martell, PhD
Park Dietz & Associates
Newport Beach, CA

Douglas H. Ubelaker, PhD
Smithsonian Institution
Washington, DC

J.C. Upshaw Downs, MD
Georgia Bureau of Investigation
Savannah, GA

Jimmie C. Oxley, PhD
University of Rhode Island
Kingston, RI

Allan J. Warnick, DDS
Wayne & Oakland Counties
Medical Examiner's Office
Livonia, MI

John J. Lentini, BA
Scientific Fire Analysis, LLC
Big Pine Key, FL

Thomas P. Shefchick, BSEE
Sunnyvale, CA

Suzanne Yang, MD
University of Pittsburgh
Pittsburgh, PA

Program Description: A multidisciplinary, multisectional faculty brings a variety of methods to the investigation of fires and explosions and to the understanding of the psychology of perpetrators and of surviving victims. Myths, old, new, and high tech, in fire investigations will be put to bed. Changes in the seventh edition of NFPA 921 Guide for Fire and Explosion Investigation will be explained. The motivations, mental states and mental disorders of arsonists will be discussed. The application of fundamental knowledge and engineering tools to the investigation of fires, using the scientific method, will be explained. An electrical engineering approach will demonstrate with case examples how fires initially reported to have been caused by electrical malfunction turned out to have been arson. The pathological component will address the approach to the postmortem examinations of victims in a fire setting, to include the expected findings, common artifacts, determination of fire versus other trauma, and masqueraders (i.e., non-fire deaths with burned bodies). This pathological overview should prepare participants to recognize what they should look for in the examination of a burned body in order to determine whether the victim died as a direct result of the fire or was otherwise dispatched with attempted concealment.

Description of investigation of large bomb scenes will emphasize novel approaches learned by the British during the PIRA bombing campaign. Issues of packaging and contamination will be given to the history of explosive accidents and attacks and/or terrorist opportunities offered by common chemicals that can be made into explosives

After an introductory discussion of explosion investigation, the multiple way in which victims of arson suffer will be described. The dynamics of the arson victim's experience will be presented and attention directed to issues of loss, survivor guilt, depression, and post-traumatic stress. Treatment of arson survivors will be explained. The physical anthropology component will cover the fundamentals of recognizing and interpreting thermal effects on bones and teeth. In this context specific attention will be given to coloration, microscopic structure and form, fragmentation patterns, antemortem versus postmortem exposure, and the complex factors involved in interpretation. The odontology contribution will explain the importance of teeth in the investigation of fires and explosions and in the identification of otherwise unrecognizable deceased victims.



WORKSHOPS



Pre-Registration Required — \$125 w/registration; \$150 workshop only

#17 Fires and Explosions: A Multidisciplinary Overview of Investigative Methods, Mental States of Perpetrators, and Psychological Trauma to Victims (continued)

Program:

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|-------------------------|---|
| 8:30 a.m. - 9:15 a.m. | Fire Investigations in the 21st Century
<i>John J. Lentini, BA</i> |
| 9:15 a.m. - 9:45 a.m. | Psychopathology of Firesetters
<i>Suzanne Yang, MD</i> |
| 9:45 a.m. - 10:15 a.m. | Engineering Methods of Fire and Explosion Investigation
<i>Douglas J. Carpenter, MS</i> |
| 10:15 a.m. - 10:30 a.m. | Break |
| 10:30 a.m. - 11:00 a.m. | Post-Mortems of Deceased Victims of Fires and Explosions
<i>J.C. Upshaw Downs, MD</i> |
| 11:00 a.m. - 11:30 a.m. | Investigation of Electrical Appearing Fires
<i>Thomas P. Shefchick, BSEE</i> |
| 11:30 a.m. - 12:00 p.m. | Discussion |
| 12:00 p.m. - 1:30 p.m. | Lunch |
| 1:30 p.m. - 2:15 p.m. | Explosion Scenes: Pre- and Post
<i>Jimmie C. Oxley, PhD</i> |
| 2:15 p.m. - 2:45 p.m. | Psychotrauma of Victims
<i>Daniel A. Martell, PhD</i> |
| 2:45 p.m. - 3:15 p.m. | Examination of Skeletal Remains of Victims of Fires and Explosions
<i>Douglas H. Ubelaker, PhD</i> |
| 3:15 p.m. - 3:30 p.m. | Break |
| 3:30 p.m. - 4:00 p.m. | Dental Identification of Victims of Fires and Explosions
<i>Allan J. Warnick, DDS</i> |
| 4:00 p.m. - 4:30 p.m. | Discussion |

Targeted Audience: Criminalistics, Engineering Sciences, General, Odontology, Pathology/Biology, Physical Anthropology, Psychiatry & Behavioral Science

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 57



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#18 Strengthening Forensic Science in the United States: A Path Forward – The Judges’ Perspective

Tuesday, February 23, 2010

8:30 a.m. - 5:00 p.m.

6.75 CE Hours

This Program is presented by the Forensic Sciences Foundation, Inc.



Educational Objectives: The goal of this workshop is to present for discussion the opinions of judges, attorneys, and a forensic scientist on the impact of what is now referred to as the “NAS Report.”

Impact on the Forensic Science Community: This presentation will impact the forensic science community by presenting how judges might be impacted by the verbiage in the NAS report.

Chair:

Stephanie Domitrovich, JD, PhD

Erie County Courthouse
Erie, PA

Co-Chair:

Joseph P. Bono, MA

Indiana University Purdue University Indianapolis
Indianapolis, IN

Faculty:

Linda L. Chezem, JD

Mooresville, IN

Kenneth E. Melson, JD

Bureau of Alcohol, Tobacco & Firearms and Explosives
Washington, DC

Robert Epstein, JD

Philadelphia, PA

W. Milton Nuzum, JD

Ohio Judicial Center
Columbus, OH

Catherine Shaffer, JD

King County Superior Court
Seattle, WA

Joseph J. Maltese, JD

New York Supreme Court
Staten Island, NY

Barbara Parker Hervey, JD

Texas Supreme Court
Austin, TX

Program Description: The goal of this workshop is to form a bridge between forensic scientists and those decision-makers in the judiciary (judges) in understanding what the courts may require in the way of expert witness testimony and report writing.

Program:

- 8:30 a.m. - 8:45 a.m. Introduction to the Program: Why Is This Program Relevant?
Joseph P. Bono, MA
- 8:45 a.m. - 9:15 a.m. Overview of the NAS Report From the Forensic Scientist's Perspective
Joseph P. Bono, MA
- 9:15 a.m. - 9:45 a.m. The Defense Attorney's Perspective
Robert Epstein, JD
- 9:45 a.m. - 10:15 a.m. The Prosecutor's Perspective
Kenneth E. Melson, JD
- 10:15 a.m. - 10:30 a.m. Break



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#18 Strengthening Forensic Science in the United States: A Path Forward – The Judges’ Perspective (continued)

Program cont.

- 10:30 a.m. - 12:00 p.m. Views From the Bench: Presentations of the Judges' Perspectives on the NAS Report
Stephanie Domitrovich, JD; Linda L. Chezem, JD; Barbara Parker Hervey, JD; W. Milton Nuzum, JD; Catherine Shaffer, JD
- 12:00 p.m. - 1:15 p.m. Lunch
- 1:15 p.m. - 3:15 p.m. Views From the Bench (continued)
Stephanie Domitrovich, JD; Linda L. Chezem, JD; Barbara Parker Hervey, JD; W. Milton Nuzum, JD; Catherine Shaffer, JD
- 3:15 p.m. - 3:30 p.m. Break
- 3:30 p.m. - 5:00 p.m. Panel Discussion

Targeted Audience: All disciplines

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 10 Pages

Continuing Legal Education

The American Academy of Forensic Sciences is applying to the states of Colorado and Washington for Accreditation of a Continuing Legal Education Activity. Continuing legal education credit will be awarded on an hour-for-hour basis.

Please contact Continuing Education Coordinator Kimberly Wrasse, kwrasse@aafs.org, no later than January 1 if you require CLE provider accreditation from another state. AAFS will apply for accreditation if you are licensed in a state that will not accept AAFS issued CLE credit to be submitted by the attorney.

Proceeds from this workshop will benefit the Forensic Sciences Foundation, Inc.





WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#19 Gunshot Wounds – Theory and Practice

Tuesday, February 23, 2010

8:30 a.m. - 5:00 p.m.

6.5 CE Hours

Educational Objectives: After attending the presentation, the attendee will appreciate the theory of mechanisms and features of gunshot wounds including handgun, rifle, and shotgun wounds. In addition, the attendee will become familiar with the principles of gunshot residue testing and the demographics of wound types and locations.

Impact on the Forensic Science Community: The presentation will impact the forensic community by imparting critical knowledge to medical examiners and death investigators regarding firearm wounds. This knowledge will be used in decision-making process of medical examiners/death investigators in deciding cause and manner of death and will augment the literature used to establish the standard of practice for the examination of firearm wounds. It will increase the competence of the medical examiner in examining firearm wound cases and thus, will improve performance on such cases.

Chair:

Vincent J.M. Di Maio, MD
San Antonio, TX

Co-Chair:

D. Kimberley Molina, MD
Bexar County Medical Examiner’s Office
San Antonio, TX

Program Description: This workshop will address the theory of wounding, including wound dynamics and the effects of the differing types of firearms and ammunition. The workshop will demonstrate entrance and exit wounds made from different types of firearms, from handguns, rifles, assault rifles, and shotguns, and will discuss and explain those differences. In addition, the workshop will address gunshot residue and its testing utility in the medical examiner setting as well as the demographics of firearm usage including range and location of wounds. Blowback and reactions times pertaining to gunshot wounds will also be discussed.

Program:

- 8:30 a.m. - 9:00 a.m. Theory of Wounding and Wound Dynamics
Vincent J.M. Di Maio, MD
- 9:00 a.m. - 10:30 a.m. Handgun Wounds
Vincent J.M. Di Maio, MD
- 10:30 a.m. - 10:45 a.m. Break
- 10:45 a.m. - 12:00 p.m. Rifles and Assault Rifle Wounds
Vincent J.M. Di Maio, MD
- 12:00 p.m - 1:30 p.m Lunch
- 1:30 p.m - 2:00 p.m Shotgun Wounds – Rifles and Assault Rifles
Vincent J.M. Di Maio, MD
- 2:00 p.m - 2:30 p.m Gunshot Residue in the Medical Examiner Setting
D. Kimberley Molina, MD
- 2:30 p.m. - 2:45 p.m. Break
- 2:45 p.m. - 3:30 p.m. Nature and Distribution of Wounds Based Upon Weapon Type
D. Kimberley Molina, MD



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#19 Gunshot Wounds – Theory and Practice (continued)

Program cont.

- 3:30 p.m. - 4:30 p.m. Blowback and Reaction Time
Vincent J.M. Di Maio, MD
- 4:30 p.m. - 5:00 p.m. Questions and Discussion
Vincent J.M. Di Maio, MD; D. Kimberley Molina, MD

Targeted Audience: Criminalistics, Engineering Sciences, General, Jurisprudence, Pathology/Biology, Physical Anthropology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 3 Pages



WORKSHOPS



Pre-Registration Required — \$200 w/registration; \$250 workshop only

#20 The Forensic Investigation of Human Remains From Armed Conflicts and Catastrophes

Tuesday, February 23, 2010

8:30 a.m. - 5:30 p.m.

7.25 CE Hours

Educational Objectives: After attending this workshop, attendees will become familiar with the main normative and practical considerations for large-scale forensic investigations in the search for missing persons from armed conflicts and catastrophes.

Impact on the Forensic Science Community: This workshop will impact the forensic community by providing an updated review of current knowledge and practice in investigations into missing persons from armed conflicts and catastrophes.

Chair:

Shuala M. Drawdy, MA
Satsuma, FL

Co-Chair:

Duarte N.P. Vieira, PhD, MD
Instituto Nacional de Medicina Legal
Coimbra, Portugal

Faculty:

John E. Byrd, PhD
JPAC – CIL
Hickam AFB, HI

William Goodwin, PhD
University of Central Lancashire
Preston, United Kingdom

Paul S. Sledzik, MS
National Transportation Safety Board
Washington, DC

Stephen Cordner, MB
Victorian Institute of Forensic Medicine
Southbank, Australia

Ute Hofmeister, MA
Geneva, Switzerland

Morris Tidball-Binz, MD
International Committee of the Red
Cross
Geneva, Switzerland

Luis Fondebrider
Capital Federal
Buenos Aires, Argentina

Thomas J. Parsons, PhD
International Commission on Missing
Persons
Serajevo, Bosnia-Herzegovina

Program Description: A multidisciplinary panel of international experts will share their recommendations, experiences, and lessons learned regarding practical considerations for large-scale forensic investigations in the search for missing persons from armed conflicts and catastrophes. Topics for discussion will range from logistical issues and constraints involved in organizing international forensic missions and integrating various forensic methods in the identification of human remains, to working with families, and addressing expectations of the bereaved. In addition, the importance of maintaining quality assurance and ethical conduct while carrying out international forensic missions will be addressed.

Program:

- | | |
|-------------------------|--|
| 8:30 a.m. - 8:45 a.m. | Welcome
<i>Shuala M. Drawdy, MA; Morris Tidball-Binz, MD</i> |
| 8:45 a.m. - 9:30 a.m. | The Challenge of Investigating the Dead From Armed Conflicts and Catastrophes: The Role of Forensic Service Providers and Related Agencies
<i>Duarte N.P. Vieira, PhD, MD</i> |
| 9:30 a.m. - 10:15 a.m. | Setting the Scene: Recommendations From the ICRC
<i>Morris Tidball-Binz, MD</i> |
| 10:15 a.m. - 10:30 a.m. | Break |
| 10:30 a.m. - 11:00 a.m. | The Value of the ICRC's Recommendations – Seven Years On
<i>Stephen Cordner, MB</i> |



WORKSHOPS



Pre-Registration Required — \$125 w/registration; \$150 workshop only

#20 The Forensic Investigation of Human Remains From Armed Conflicts and Catastrophes (continued)

Program cont.

11:00 a.m. - 11:30 a.m.	The Value of Preliminary Investigations: Practical Considerations <i>Luis Fondebrider</i>
11:30 a.m. - 12:30 p.m.	Recovery of Remains, Documentation and Collection, and Management of Information for the Identification of the Missing <i>Ute Hofmeister, MA</i>
12:30 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 2:00 p.m.	Preparing for and Running a Forensic Operation in Challenging Contexts <i>John E. Byrd, PhD</i>
2:00 p.m. - 2:45 p.m.	Forensic DNA Analysis and Identification of Human Remains <i>William Goodwin, PhD</i>
2:45 p.m. - 3:15 p.m.	A Combined Approach to the Search For the Missing: The Experience of the ICMP <i>Thomas J. Parsons, PhD</i>
3:15 p.m. - 3:30 p.m.	Break
3:30 p.m. - 4:00 p.m.	Working With Families of Victims of Mass Fatalities <i>Paul S. Sledzik, MS</i>
4:00 p.m. - 4:30 p.m.	Addressing Expectations of the Bereaved <i>Luis Fondebrider</i>
4:30 p.m. - 5:00 p.m.	Summing It All Up: Benchmarks and Practical Considerations for the Forensic Recovery and Identification of Victims of Armed Conflict <i>Luis Fondebrider</i>
5:00 p.m. - 5:30 p.m.	Questions and Answers

Targeted Audience: General, Pathology/Biology, Physical Anthropology

Knowledge Level Required: Intermediate (Some Knowledge)

Expected Handout Length: 170 Pages



WORKSHOPS



Pre-Registration Required — \$100 w/registration; \$125 workshop only

#21 Insects: Their Practical Applications in Death Investigations

Tuesday, February 23, 2010

1:00 p.m. - 5:00 p.m.

3.75 CE Hours

Educational Objectives: After attending this presentation, attendees will have an understanding on the practical application insects can have in death investigations. Attendees will learn how insects can be used in estimating the postmortem interval; how insects can be assessed in the geographical association between a victim, crime scene, and assailant; how insects can be utilized in toxicological tests of suspect residue from a corpse; and how DNA evaluation in insects can be utilized in human identification and insect species identification. Attendees will also learn proper insect collection and preservation methods.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing practical guidelines on how insect evidence can be of significant importance in death investigations.

Chair:

Ralph E. Williams, PhD
Purdue University
West Lafayette, IN

Co-Chair:

Neal H. Haskell, PhD
Rensselaer, IN

Faculty:

Jeffrey D. Wells, PhD
West Virginia University
Morgantown, WV

Program Description: Insect evidence can be of pertinent value in death investigations. Insects can be useful in estimating the postmortem interval, geographical association of the crime scene, assessing toxicological residues, and aiding in human identification from DNA analysis. These facets of forensic entomology will be presented as well as how insect evidence should be properly collected and preserved for examination and analysis.

Program:

1:00 p.m. - 1:15 p.m.	Introduction <i>Ralph E. Williams, PhD</i>
1:15 p.m. - 2:30 p.m.	How Insect Evidence is Used in Estimating the Postmortem Interval and Geographical Association of the Crime Scene <i>Neal H. Haskell, PhD</i>
2:30 p.m. - 2:45 p.m.	Break
2:45 p.m. - 4:00 p.m.	How Insects Are Used in Assessing Toxicological Residues and Aiding in Human Identification From DNA Analysis <i>Jeffrey D. Wells, PhD</i>
4:00 p.m. - 5:00 p.m.	Procedures for Collecting and Preserving Entomological Evidence at the Death Scene <i>Ralph E. Williams, PhD</i>

Targeted Audience: Criminalistics, General, Pathology/Biology, Physical Anthropology, Toxicology

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 10 Pages



WORKSHOPS



Pre-Registration Required — \$125 w/registration; \$150 workshop only

#22 Navigating the World of Forensic Journals & Forensic Information

Tuesday, February 23, 2010

1:00 p.m. - 5:00 p.m.

3.5 CE Hours

Educational Objectives: After attending this workshop, attendees will possess new techniques and guidelines that will assist them in searching for and assessing forensic information and making decisions about the proper use of copyrighted material, as well as gain insight into the world of forensic journal publishing.

Impact on the Forensic Science Community: This presentation will impact the forensic community by providing practical information that can be used by anyone working in any field of the forensic sciences. Finding the right information is central to the progress of any casework or discipline, and this workshop will present the full life cycle of forensic information—how the information is generated, distributed, retrieved, and utilized—by the leading practitioners in the field.

Chair:

Barry K. Logan, PhD
NMS Labs
Willow Grove, PA

Co-Chair:

A.W. Jones, PhD
National Lab Forensic Chemistry
Linkoping, Sweden

Faculty:

Bruce A. Goldberger, PhD
University of Florida
Gainesville, FL

Michael A. Peat, PhD
The Woodlands, TX

Jeffrey B. Teitelbaum, MLIS
Forensic Laboratory Services Bureau
Seattle, WA

Mary A. Hotchkiss, JD
University of Washington School
of Law
Seattle, WA

Jay A. Siegel, PhD
Indiana University Purdue University
Indianapolis
Indianapolis, IN

Program Description: This workshop will consist of a 4-hour lecture/panel format. Three speakers will explore topics (impact factors, search techniques, copyright issues, etc.) relating to the use of forensic journals and forensic information, and a panel of forensic journal editors and publishers will discuss the issues facing major publishing companies (article costs, online access, open access, etc.).

Program:

- 1:00 p.m. - 1:45 p.m. Update on Copyright for Users of Scientific Information
Mary A. Hotchkiss, JD
- 1:45 p.m. - 2:30 p.m. Impact Factor in Forensic Science Publication
A.W. Jones, PhD
- 2:30 p.m. - 3:00 p.m. Break
- 3:00 p.m. - 3:45 p.m. Online Searching & Forensic Databases
Jeffrey B. Teitelbaum, MLIS
- 3:45 p.m. - 5:00 p.m. Publishing in Forensic Science Journals
Vincent J.M. Di Maio, PhD; Bruce A. Goldberger, PhD; Jay A. Siegel, PhD; Michael A. Peat, PhD

Targeted Audience: All disciplines

Knowledge Level Required: Basic (Little to no Knowledge)

Expected Handout Length: 40 Pages



WORKSHOPS



Pre-Registration Required — \$125 w/registration; \$150 workshop only

#23 Good Measurement Practices in the Proper Use and Calibration of Balances and Pipettes

Tuesday, February 23, 2010

1:00 p.m. - 5:00 p.m.

3.75 CE Hours

Educational Objectives: The objective of this workshop is to present a thorough and concise synopsis of the procedures required to properly use and calibrate laboratory balances and pipettes. The topics covered are targeted towards preparing forensic science laboratories for accreditation under ISO/IEC 17025 General Requirements for the competence of testing and calibration laboratories.

Impact on the Forensic Science Community: This workshop will have a significant impact on laboratory personnel and administrators of forensic science laboratories by educating forensic scientists on the proper use and calibration of balances, weights, and pipettes. By providing proper technical information to forensic science laboratory personnel, the analyses and tests performed will be assured to be reliable and hold up to legal challenges when confronted by the adversarial process of the court system.

Chair:

Thomas A. Brettell, PhD

Cedar Crest College
Allentown, PA

Co-Chair:

Janine Kishbaugh, MS

Cedar Crest College
Allentown, PA

Faculty:

Joseph Moran, BS

Troemner
Thorofare, NJ

Donna Lodek

Troemner
Thorofare, NJ

Program Description: As forensic science laboratories strive to upgrade and maintain their accreditation to meet ISO/IEC 17025 standards, personnel must understand the proper use of the balances, weights, and pipettes. This understanding includes the meaning of the measurement and the variables that exist in this measurement, such as uncertainty and certification. An important part of this workshop will involve detailed discussions of the procedures and issues involved in handling, measuring, and certification of balances, weights, and pipettes. The goal of the workshop is to present suggestions for developing viable, practical suggestions for making proper measurements with laboratory balances and pipettes for achieving accreditation under the ISO accreditation program for a forensic science laboratory.

Program:

1:00 p.m. - 1:15 p.m.	Introductory Remarks <i>Donna Lodek</i>
1:15 p.m. - 2:00 p.m.	Introduction to Metrology and Balances & Weights <i>Thomas A. Brettell, PhD</i>
2:00 p.m. - 2:45 p.m.	Good Measurement Practices <i>Thomas A. Brettell, PhD; Joseph Moran, BS</i>
2:45 p.m. - 3:00 p.m.	Break
3:00 p.m. - 4:00 p.m.	Calibration, Uncertainty Considerations, and Quality Assurance of Pipettes <i>Joseph Moran, BS</i>
4:00 p.m. - 5:00 p.m.	Discussion

Targeted Audience: Criminalistics, Toxicology

Knowledge Level Required: Basic (Little to no knowledge)

Expected Handout Length: 100 Pages