

Technology Integration

Session Agendas

2008 Triennial Meeting

of the

International Association of Forensic Sciences (IAFS)

New Orleans, LA

July 21-26, 2008

Note: Agendas were compiled from several postings on the 2008 IAFS website.



BJA

**Bureau of
Justice Assistance**

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Scientific Sessions — Thursday

Clinical Forensic Medicine

World Police Medical Officers

Moderators: Philip S.L. Beh, MBBS, DMJ
The University of Hong Kong
Hong Kong SAR, China

William P. Ryan, MBBS
Nowra, Australia

- 8:30 a.m. - 9:00 a.m. **660** **Healthcare Issues of Detainees in Police Custody, London, UK**
Jason Payne-James, LL.M, MSc, MBBS; P.G. Green, DMJ; Natasha Green, BA; M.H.W. Munro, FDS, MBBS; Greta McLachlan; Tara Moore, PhD, BS*
- 9:00 a.m. - 9:20 a.m. **541** **Medicolegal Evaluation of Juveniles Directed to Delinquent Behavior in Turkey**
Gamze Kavas; Riza Yilmaz, MD; Sema Demircin; Veli Ozdemir; Suleyman Serhat Gurpinar, MD**
- 9:20 a.m. - 9:40 a.m. **220** **The Unified Method for Analysis on Cause of Death and Injury**
Hai-Peng Wang, MM; Xiao-Jun Yu, PhD; Yi Lu, BM; Shu-Wei Yu, BM*
- 9:40 a.m. - 10:00 a.m. **673** **Retrospective Analysis of Body Injuries in the Region of Thessaloniki-Hellas**
*Spyridon G. Koutsoukis**
- 10:00 a.m. - 10:30 a.m. **Break**
- Moderators: Guy A. Norfolk, MBChB, DMJ
Royal College of Physicians
Bristol, United Kingdom
- Patricia A. Ryan, MBBS
Nowra, Australia
- 10:30 a.m. - 10:50 a.m. **239** **Intra and Extra-Familial Sexual Crimes: Consequences Severity**
Francisco Taveira, MD; Katerina Puentes, MD; Eduarda Matos, MSc; Teresa Magalhães, MD, PhD*
- 10:50 a.m. - 11:10 a.m. **93** **Rape Epidemic in Mthatha Area of South Africa**
*Banwari L. Meel, MD**
- 11:10 a.m. - 11:40 a.m. **Break**
- 11:40 a.m. - 12:00 p.m. **694** **General Clinical Management of Craniocerebral Traumatized Patients in Road Accidents**
Stan Cristian; Carmen Stan, MD, PhD*
- 1:00 p.m. - 1:20 p.m. **577** **Missed Ectopic Pregnancy Leading to Death – Medicolegal Perspective**
*Ramesh K. Sharma, MD**
- 1:20 p.m. - 1:40 p.m. **388** **Forensic Clinical Appraisal About Large Vestibular Aqueduct Syndrome (LAVS) of Three Cases**
*Shengli Di**
- 1:40 p.m. - 2:00 p.m. **686** **Spectrum of Fatal Common Household Poisoning in North West India: A 30-Year Autopsy Experience**
*Dalbir Singh, MD**

Scientific Sessions — Thursday

Criminalistics

Moderator: *Patrick Buzzini, MSc*
Forensic Investigative Science
West Virginia University
Morgantown, WV

- 9:00 a.m. - 9:30 a.m. **117** **The Development and Evaluation of Radiological Decontamination Procedures for Forensic Evidence**
*Andrew G. Parkinson, BSc**; *Michael Colella, MSc*; *David Hill, BSc*;
Tegan C. Evans, BSc; *Claude P. Roux, PhD*
- 9:30 a.m. - 9:50 a.m. **148** **The Effects of Ionising Radiation Exposure on the Forensic Assessment of Critical Trace Evidence**
*Michael Colella, MSc**; *Andrew G. Parkinson, BSc*; *Tegan C. Evans, BSc*;
Claude P. Roux, PhD; *Chris J. Lennard, PhD*; *Serena Abbondante, BSc*;
James Robertson, PhD
- 9:50 a.m. - 10:05 a.m. **156** **A New Statistical Method to Assess the Number of Fibers Transferred by a Textile on Car Seats**
*Genevieve Massonnet**; *Florence Monard Sermier*
- 10:05 a.m. - 10:20 a.m. **243** **Spectral Analysis of Metameric Blue Fibers and Their Forensic Significance**
*Paul Martin, PhD**; *Mary Eng, BS*; *Candida Bhagwandin, BS*

10:20 a.m. - 10:45 a.m. **Break**

Moderator: *Robin Bowen, MA*
West Virginia University
Morgantown, WV

- 10:45 a.m. - 11:15 a.m. **280** **Trace Element Analysis Using X-Ray Fluorescence Microscope**
*Sergey Mamedov, PhD**; *Jon Goldey, MS*; *George Setola, MS*; *Andrew Whitley, PhD*
- 11:15 a.m. - 11:45 a.m. **550** **Application of Cathodoluminescence Microspectrophotometry for the Forensic Comparison of Concrete Samples**
*Graham F. Peaslee, PhD**; *Christopher S. Palenik, PhD*; *JoAnn Buscaglia, PhD*
- 11:45 a.m. - 12:05 p.m. **397** **What is the Occurrence of Petrol Traces in Car Boots? An Australian Survey**
Michelle Hancock, BSc; *Philip Maynard, PhD**; *Karen Cavanagh-Steer, BSc*;
Naomi Speers, PhD; *Claude P. Roux, PhD*

Moderator: *John D. De Haan, PhD*
Fire-Ex Forensics, Inc.
Vallejo, CA

- 1:30 p.m. - 1:45 p.m. **556** **The Detection of Organic Explosives Using Lab-on-a-Chip Technology**
Alison Beavis, BSc; *Philip Doble, PhD*; *Ilona Kramer, BSc**; *Philip Maynard, PhD*;
Michael Dawson, PhD; *Chris J. Lennard, PhD*; *Claude P. Roux, PhD*
- 1:45 p.m. - 2:15 p.m. **629** **Identification of Synthetic Fibers Using Hotstage Microscopy and Eutectic Melting Point With P-Nitrophenol**
*Kelly M. Brinsko, MS**
- 2:15 p.m. - 2:30 p.m. **47** **The Application of an Activated Carbon Membrane for Analysis of Ignitable Liquid Residues**
*Ruiqin Yang, PhD**; *Wenlin Xie, BS*
- 2:30 p.m. - 2:50 p.m. **398** **Analysis of Emerging Explosive Mixtures and Explosive Precursors**
Henriques Noel, BSc; *Philip Maynard, PhD**; *Philip Doble, PhD*; *Sonia Tafлага, PhD*

Scientific Sessions — Thursday

2:50 p.m.	-	3:10 p.m.		Break
3:10 p.m.	-	3:30 p.m.	557	Analysis of Organic Explosives via Rapid Resolution Liquid Chromatography Triple Quadrupole Mass Spectrometry <i>Alison Beavis, BSc; Jessica Booth, BSc*; Tessa Barrett, BSc; Claude P. Roux, PhD; Philip Doble, PhD</i>
3:30 p.m.	-	4:00 p.m.	502	An Overview of the Construction, Chemical Nature, and Laboratory Analysis of Chemical Reaction Bombs <i>Vincent J. Desiderio, MS*; Peter Diaczuk, BS</i>
4:00 p.m.	-	4:25 p.m.	606	Urea Nitrate: A Powerful Explosive That is Easier to Make Than Frying an Egg <i>Joseph Almog, PhD*</i>
4:25 p.m.	-	4:40 p.m.	705	Blood on Black - Using Polarized Light to Enhance Bloodstains on Dark Surfaces <i>Rebecca Bucht*; Peter R. De Forest, DCrim; Frani Kammerman; Brooke Weinger</i>
4:40 p.m.	-	5:00 p.m.	722	Nanomanipulation Coupled to Nanospray Mass Spectrometry: Applications to Direct Cell Probing and Trace Fiber Analysis <i>Nicole R. Ledbetter*; Guido F. Verbeck, PhD</i>

Drugs of Abuse

Cocaine

Moderator: *Sanford A. Angelos, MS, MEd*
Aris Associates, Ltd.
Chicago, IL

8:45 a.m.	-	9:00 a.m.		Introduction
9:00 a.m.	-	9:20 a.m.	35	A Simple Methodology for Routine Coca Leaves Analysis <i>Nestor A. Gomez Guerrero, BS*</i>
9:20 a.m.	-	9:40 a.m.	164	Determination of Cocaine and its Metabolite Benzoylcegonine in Hair Using Liquid Chromatography-Tandem Mass Spectrometry <i>Ping Xiang*; Min Shen, Qiran Sun</i>

Steroids

9:40 a.m.	-	10:00 a.m.	196	Physiological Concentrations of Endogenous Anabolic Steroids in Human Hair <i>Min Shen*; Ping Xiang, MS*</i>
10:00 a.m.	-	10:20 a.m.	130	Proteomics-Based Method for the Identification of Human Growth Hormone (HGH) <i>Eric S. Wisniewski, PhD*; David K. Rees, MS; Esther W. Chege, MS</i>
10:20 a.m.	-	10:40 a.m.		Break

Cannabis

10:40 a.m.	-	11:00 a.m.	638	Operation Reap - Towards True Hydroponic Yield Estimates <i>Glenys A. Knight, BSc*; Sean Hansen</i>
11:00 a.m.	-	11:20 a.m.	100	Remote Detection of Outdoor Cannabis Grow-Ops <i>Margaret Kalacska, PhD; Brian Thiessen, BSc*</i>

Scientific Sessions — Thursday

- 11:20 a.m. - 11:40 a.m. **661** **Analyzing Salvia Divinorum and its Active Ingredient Salvinorin A Utilizing Thin Layer Chromatography and Gas Chromatography / Mass Spectrometry**
*John D. Jermain, MS**
- 11:40 a.m. - 12:00 p.m. **703** **The Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG)**
*Scott R. Outlon, BS**
- Moderator: *Jeffrey H. Comparin, BS*
U.S. Drug Enforcement Administration
Dulles, VA
- 1:00 p.m. - 3:30 p.m. **506** **Fentanyl, Multiple Fatalities, and Forensic Science: A Multidisciplinary Symposium**
Ira S. Lurie, MS; Arthur Berrier, PhD*; Daniel S. Isenschmid, PhD*;*
J. Scott Denton, MD; Shinichi Suzuki, PhD**

Fingerprint Detection and Identification

Moderator: *Kathryn Siegfried*
Purdue University
West Lafayette, IN

- 8:30 a.m. - 8:50 a.m. **83** **A Long Afterglow Phosphor Powder for Fingerprint Detection**
Li Liu; Zhongliang Zhang, MS*
- 8:50 a.m. - 9:10 a.m. **394** **Ascorbic Acid Analogues as Reagents for the Detection of Latent Fingermarks - Analysis of the Reaction With Amino Acids**
Freya Turner, BSc; Ronald Shimmon, PhD; Philip Maynard, PhD;*
Claude P. Roux, PhD; Chris J. Lennard, PhD
- 9:10 a.m. - 9:30 a.m. **553** **The Application of Anti-Stokes Luminescence for the Detection and Enhancement of Latent Fingermarks**
Elicia Bullock, BSc, Philip Maynard, PhD, Brian J. Reedy, PhD,*
Chris J. Lennard, PhD, Claude P. Roux, PhD
- 9:30 a.m. - 9:45 a.m. **48** **Preparation and Usage of a New Fingerprint Developing Membrane**
Ruiqin Yang, PhD; Wenlin Xie, BS*
- 9:45 a.m. - 10:05 a.m. **578** **Diacetylene Copolymers for Fingerprint Development**
*Meena Mikhael, BSc; Mark Tahtouh, BSc; Brian J. Reedy, PhD**
- 10:05 a.m. - 10:30 a.m. **Break**
- Moderator: *Victor Weedn, MD, JD*
Office of the State medical Examiner
Trenton, NJ
- 10:30 a.m. - 11:00 a.m. **623** **Subsequent Chemical Treatment for the Enhancement of Latent Prints Developed with Silver Physical Developer**
*David E. Burow, BS, MSFS**
- 11:00 a.m. - 11:30 a.m. **390** **Mechanism Studies on the Indanedione-Zinc Reagent**
Xanthe M. Spindler, BSc; Ronald Shimmon, PhD; Claude P. Roux, PhD;*
Chris J. Lennard, PhD
- 11:30 a.m. - 11:45 a.m. **128** **Application of Functionalized Nanoparticles for Developing Latent Fingerprints**
Yuan Feng Wang, DSc; Rui Qin Yang, DSc; Yan Ji Wang, DSc; Ke Zhao, MSc;*
Yong Feng Zhao, MSc; Zhi Xia Shi, MSc; Jian Jun Liu, DSc

Scientific Sessions — Thursday

- 11:45 a.m. - 12:00 p.m. **56** **The Quantification of Fingerprint Quality Using a Relative Contrast Index**
Jill D. Humphreys, BSc; Glenn Porter; Michael Bell*
- Moderator: *Susan M. Ballou, MS*
NIST, Law Enforcement Standards
Gaithersburg, MD
- 1:30 p.m. - 2:00 p.m. **324** **Human Identification by Means of Sweat Pores**
*Carlos E. Alvarez Cruz**
- 2:00 p.m. - 2:20 p.m. **276** **Development of a Digital Imaging Process for Indirect Latent Fingerprint Comparison in Research**
Shaheen B. Aumeer-Donovan, BSc; Bruce Comber; Chris J. Lennard, PhD; Claude P. Roux, PhD*
- 2:20 p.m. - 2:40 p.m. **277** **A Preliminary Evaluation of the Use of an Inkjet Printer to Produce a Latent Fingerprint Standard**
Shaheen B. Aumeer-Donovan, BSc; Chris J. Lennard, PhD; Claude P. Roux, PhD*
- 2:40 p.m. - 3:00 p.m. **533** **Digital Measuring Fingerprint and Palmprint Details: A New Technique of Digital Identification**
*John Wang, PhD**
- 3:00 p.m. - 3:30 p.m. **Break**
- 3:30 p.m. - 4:15 p.m. **88** **Validation and Implementation of Probabilistic Based Fingerprint Evidence**
Cedric Neumann; Nicole Egli; David Reynolds; Paul Chamberlain*

Firearm / Toolmark Examination & Identification

Moderator: *TBD*

- 1:30 p.m. - 1:45 p.m. **480** **Comparing Two Methods of Analysis: Application of Factorial Design to the Evaluation of Modified Griess Test**
Cristian Lizama, BSc; Rubén Arancibia, BSc*; Marcelo Higuera, BEngSc.; Sylvia Figueroa, BSc; Mario Ollino, DrSc*
- 1:45 p.m. - 2:05 p.m. **657** **Determination of Direction of Shot at Presence of One Track of Shell on a Barrier**
Bukenbay Bishmanov, PhD; Konstantin Aleksandrov**
- 2:05 p.m. - 2:25 p.m. **535** **Digital Measuring Rifling Angle: A New Technique of Digital Identification**
*John Wang, PhD**
- 2:25 p.m. - 2:55 p.m. **555** **Laser Ablation ICP-MS of Metal Particles Generated From the Illicit Removal of Firearm Serial Numbers**
Julia F. Norman, BSc; Philip Doble, PhD; Alison Beavis, BSc; Steele Diggles, BSc; Eric Davies; Claude P. Roux, PhD*
- 2:55 p.m. - 3:30 p.m. **Break**
- 3:30 p.m. - 3:50 p.m. **193** **Reproducibility of Ejector Marking on Expended Cartridge Cases**
*Tsuneo Uchiyama**
- 3:50 p.m. - 4:05 p.m. **696** **The Identification of Bullets Fired From Ten Consecutively Rifled 9mm Pistol Barrels – A Research Project Involving 446 Forensic Scientists From Laboratories in 18 Countries**
James E. Hamby, PhD; David J. Brundage, MS; James W. Thrope, PhD*

Scientific Sessions — Thursday

Forensic Biology, DNA Profiling, and Serology

Moderator: *Lawrence A. Quarino, PhD*
Cedar Crest College
Allentown, PA

- 8:30 a.m. - 8:55 a.m. **554** **Application of the VALID™ Software to Manage Quality Assurance Activities**
*Jacki Benfield, BS**
- 8:55 a.m. - 9:15 a.m. **166** **Success Rate of DNA-Typing of Vaginal and Anal Swabs in 34 Sexual Assault Cases**
*Kim Vos, MSc**
- 9:15 a.m. - 9:30 a.m. **246** **Micromanipulation Separation of Cells for Short Tandem Repeat Analysis**
Lan Hu, MD; An-Quan Ji, MS; Cai-Xia Li, MD; Qin Su, MS; Xin Li, MS*
- 9:30 a.m. - 9:45 a.m. **238** **Comparison of Five Fabric Types as a Swabbing Medium for the Removal of DNA From a Glass Surface**
Stacie Kaufman; Christina Mulligan*; Lawrence A. Quarino, PhD*
- 9:45 a.m. - 10:15 a.m. **Break**

Moderator: *Stacie R. Kaufman*
Cedar Crest College
Allentown, PA

- 10:15 a.m. - 10:40 a.m. **561** **Advancing Microfluidic Systems Honed for Forensic DNA Analysis**
*James P. Landers, PhD**
- 10:40 a.m. - 11:05 a.m. **262** **Genebench-FX™: Towards Sample-In to Results-Put Analysis of Forensic Samples in Under 45 Minutes**
*Eugene Tan, PhD**
- 11:05 a.m. - 11:20 a.m. **586** **A Multiplexed SNP Detection Assay for Human Identification**
Rixun Fang, PhD; Fiona Hyland, PhD; Pius Brzoska, PhD; Jaiprakash Shewale, PhD; Judith R. Kidd, PhD; Kenneth K. Kidd, PhD; Manohar R. Furtado, PhD**
- 11:20 a.m. - 11:35 a.m. **664** **Haplotype Block: A New Type of Forensic DNA Markers**
Jianye Ge, MS; Huifeng Xi, MS; Bruce Budowle, PhD; Ranajit Chakraborty, PhD*
- 11:35 a.m. - 11:55 a.m. **174** **Development of a Forensic Screening Tool: The PowerPlex® S5 System**
Katie Zurbuchen, MS; Dawn Rabbach; Patricia Fulmer, PhD; Cynthia Sprecher, BS; Rita Weispenning, PhD; Melissa Schwandt, PhD; Curtis Knox, BS; Douglas Storts, PhD*

Moderator: *Lucy Davis Houck, BHS*
LDH Consultants, LLC
Morgantown, WV

- 1:30 p.m. - 1:50 p.m. **379** **Sequential Unmasking: A Means of Minimizing Observer Effects in Forensic DNA Interpretation**
Dan E. Krane, PhD; Simon Ford, PhD; Jason Gilder, PhD, JD; Keith Inman, MCrim; Allan Jamieson, PhD; Roger Koppl, PhD; Irv Kornfield, PhD; D. Michael Risinger, JD; Norah Rudin, PhD; Marc S. Taylor; William Thompson, PhD, JD*
- 1:50 p.m. - 2:15 p.m. **368** **Analytical Principals in the Interpretation of DNA Profiles**
*Bruce R. McCord, PhD**

Scientific Sessions — Thursday

2:15 p.m.	-	2:35 p.m.	175	Validation of an Extraction Methodology for Obtaining of High Quality Genomic DNA From Forensic Evidence Samples <i>Maxim G. Brevnov, PhD; Hemant S. Pawar, PhD; Janna Mundt, PhD; Manohar R. Furtado, PhD; Jaiprakash G. Shewale, PhD*</i>
2:35 p.m.	-	2:55 p.m.	146	An Automated System for the High-Throughput Processing of Differential Extraction Samples <i>Ryan Olson, BS; Christopher Cowan, PhD; Melissa Schwandt, PhD*; Curtis D. Knox, BS; Doug Storts, PhD</i>
2:55 p.m.	-	3:25 p.m.		Break <i>Moderator: Joseph E. Warren, PhD Burleson, TX</i>
3:25 p.m.	-	3:50 p.m.	139	A DNA-Based Multiplex Screening Tool for Separation of Fragmented and Commingled Skeletal Remains <i>Angela Ambers, MS*; Meredith Turnbough, MS; Rhonda Roby, MS; Joseph E. Warren, PhD; Robert Benjamin, PhD</i>
3:50 p.m.	-	4:10 p.m.	362	The STR Profiling of Human Tissues Fixed in Unbuffered Formalin <i>Liu Yan, BS*</i>
4:10 p.m.	-	4:25 p.m.	118	The Stability of DNA Extracted From Bones by Developed Silica-Based Method <i>Tuo Ya, PhD*; Zheng Hai-Bo, MS; Zhang Hong-Bo, PhD; Li Sheng-Bin, PhD</i>
4:25 p.m.	-	4:35 p.m.	201	Study on the Construction of D2S1 338 Allelic Ladder <i>Li Yuan, MS*; Tao Cheng Jiang, MS</i>

Forensic Nursing and Sexual Assault Examination

*Moderator: Virginia A. Lynch, MSN, RN
University of Colorado at Colorado Springs
Colorado Springs, CO*

8:00 a.m.	-	8:30 a.m.	237	The Impact of Forensic Nursing and Its Effectiveness in Criminal Justice <i>Michele Bishop, MS*</i>
8:30 a.m.	-	9:00 a.m.	274	Exploring the Role of Forensic Nursing: Implementation of a SANE Program in the Capital City <i>Wanda L. Pezant, BSN, RN*; Randall Brown, MD*</i>
9:00 a.m.	-	10:00 a.m.	653	Preparing the Clinical Forensic Nurse for Criminal Trial Testimony <i>Jamie J. Ferrell, BSN, RN*</i>
10:00 a.m.	-	10:30 a.m.		Break
10:30 a.m.	-	11:00 a.m.	648	Sexual Abuse of the African Child and the Forensic Nurse Examiner <i>Virginia A. Lynch, MSN, RN*</i>
11:00 a.m.	-	12:00 p.m.	662	Assessment of Strangulation in the Clinical Setting to Trial Presentation <i>Tiffani Dusang, BSN, RN*</i>

Scientific Sessions — Thursday

Moderator: *Virginia A. Lynch, MSN, RN*
University of Colorado at Colorado Springs
Colorado Springs, CO

- 1:00 p.m. - 2:00 p.m. **663** **Recognition of Domestic Violence During Pregnancy**
*Floyd Hand, RN**
- 2:00 p.m. - 2:30 p.m. **716** **Victim Education Regarding Expectations of the “CSI Effect”**
*Valerie K. Fahrnow, BS, BSN, RN**
- 2:30 p.m. - 3:00 p.m. **Break**
- 3:00 p.m. - 3:45 p.m. **713** **Forensic Nursing Science: Sexual Trauma and Death Investigation**
*Virginia A. Lynch, MSN, RN**
- 3:45 p.m. - 4:30 p.m. **717** **Touch and Transfer DNA Samples — Evidence of the Future: Misconception, Potentials, and Real Life Applications**
*Valerie K. Fahrnow, BS, BSN, RN**

Forensic Odontology

Moderator: *Philip J. Levine, DDS*
Pensacola, FL

- 3:30 p.m. - 3:50 p.m. **652** **Age Determination From Fetus and Infant Teeth**
Sema P. Aka; Nergis Canturk, MD; Murat Yagan, MD; Rukiye Dagalp, PhD*
- 3:50 p.m. - 4:10 p.m. **646** **Clinical Radiological 2nd and 3rd Molar Ossification vis-à-vis Epiphyseal Changes in the Elbow Region of Cosmopolitan Indians Compared With the Three Major Malaysian Races**
*George Paul, MBBS, MD, DMJ**
- 4:10 p.m. - 4:30 p.m. **600** **Dental Chart Identification of a Dismembered Female Body**
*Mary Piamba**
- 4:30 p.m. - 4:50 p.m. **545** **Forensic Approach in Cases of Professional Odontological Responsibility in Colombia**
*Jorge Alfonso Casas Martinez**
- 4:50 p.m. - 5:20 p.m. **219** **Identification of an Unidentified Skeletal Assemblage From a Mass Grave - 1755 Earthquake of Lisbon: Palaeodemography and Palaeopathology Identification by Dental Parameters - Part I**
Cristiana Maria P. Pereira, DDS; Mário Filipe Bernardo, PhD; Maria Cristina de Mendonça, PhD; Miguel Telles Antunes, PhD; Jorge Costa Santos, PhD*
- 5:20 p.m. - 5:35 p.m. **38** **Hurricane Katrina - Recovery and Identification of the Victims**
*Robert E. Barsley, DDS, JD**
- 5:35 p.m. - 5:50 p.m. **32** **Weighing of Highly Significant Dental Features in Forensic Identifications**
*Herman Bernitz, BChD, PhD**

Scientific Sessions — Thursday

Forensic Pathology

Moderator: James G. Young, MD
Wyevale, Ontario
Canada

- 9:00 a.m. - 9:15 a.m. **269** **A Series of Accidental Hanging Deaths in Children**
Serafettin Demirci, MD; Kamil Hakan Dogan, MD; Mete K. Gulmen, MD; Zerrin Erkol, MD*
- 9:15 a.m. - 9:35 a.m. **106** **An Autopsy-Based Retrospective Study of Injury Patterns of Homicide in Hong Kong: Injuries Pattern, Severity, and Prediction of Motive and Relationship With the Offender**
Kwan Ip Au; Philip S.L. Beh, MBBS, DMJ*
- 9:35 a.m. - 9:55 a.m. **430** **An Unusual Case of Multiple Gunshot Suicide**
Andreas K. Marnerides, MD; Eleni Zangelidou, MD, PhD; Roumbini Leontari, MD, PhD*
- 9:55 a.m. - 10:10 a.m. **72** **Analysis of 32 Deaths During Aesthetic Procedures**
*Jorge E. Paredes, MD; Andres D. Restrepo, MD**
- 10:10 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:45 a.m. **337** **Analysis of Postmortem Metabolic Changes Using ATR-Fourier Transform Infrared Spectroscopy**
Ping Huang, MD; Ke Yong, BS; Bo Xin, BS; Tuo Ya, BS; Guangde Yang, PhD; Zhenyuang Wang, MD, PhD*
- 10:45 a.m. - 11:00 a.m. **119** **Autopsy in Iran, a Legend or a Necessity? Current Problems of Doing Autopsy in a Moslem Country, Iran**
Hamid Reza Sharifzad; Roya Rategh*
- 11:00 a.m. - 11:40 a.m. **609** **Characterization of the Cases of Cyanide Poisoning - Bogota, Colombia 1997-2007**
*Adriana Garcia**
- 11:40 a.m. - 12:10 p.m. **601** **Comparison of Atherosclerosis Ratio of Three Main Arteries at Autopsies in Trabzon**
Nursen Turan; Ismail Birincioglu*; Yavuz Ozoran; Umit Cobanoglu; Mehmet Ali Ca*
- 1:30 p.m. - 1:45 p.m. **151** **Establishment of the Model of TSAH and a Study on Relationship Between TSAH and Blood Alcohol Concentration in Rats**
Shu-Wei Yu, BM; Xiao-Jun Yu, PhD; Yi Lu, MM; Bo Hu, BM*
- 1:45 p.m. - 2:05 p.m. **103** **Fracture of the Cricoid as a Potential Pointer to Homicide: A Six Year Retrospective Study of Neck Structures Fractures in Hanging Victims**
Anny Sauvageau, MD, MSc; Caroline Tanguay, MD, MSc*
- 2:05 p.m. - 2:20 p.m. **666** **Mechanisms of Delayed Splenic Rupture: A New Hypothesis**
Sarathchandra Kodikara, MBBS, MD, DLM; Murugapillai Sivasubramaniam, MBBS, MD, DLM*
- 2:20 p.m. - 2:35 p.m. **28** **Postmortem Alterations in the Muscle: Time and Temperature Dependence of Selective Protein Markers**
Shashi K. Jasra, PhD; Ashley Lutz; Crystal Abbas, BS; Alden Warner, PhD*
- 2:35 p.m. - 3:00 p.m. **109** **Risk of Hand-Grenade Explosion and Public Health in Transkei Region of South Africa - Case Reports**
*Banwari L. Meel, MD**
- 3:00 p.m. - 3:30 p.m. **Break**

Scientific Sessions — Thursday

- 3:30 p.m. - 3:45 p.m. **678** **Simultaneous Sudden Infant Death in Twins From Brugada Syndrome - Critical Forensic Issues in Death Investigation and the Role of DNA Testing**
Steven B. Karch, MD; Irene Riezzo, MD; Stefano Neri, MD; Christoforo Pomara, MD*
- 3:45 p.m. - 4:05 p.m. **102** **Six Year Retrospective Study of Suicidal Hangings: Determination of the Pattern of Limb Lesions Induced by Body Responses to Asphyxia by Hanging**
*Anny Sauvageau, MD**
- 4:05 p.m. - 4:25 p.m. **321** **Study of Relationship Between the Pathological Change of Intima and Internal Elastic Lamina in Human Coronary Artery and the Coronary Heart Disease and Sudden Coronary Death**
Xinshan Chen, MD; Guoyan Liu, MD*
- 4:25 p.m. - 4:40 p.m. **152** **Study on Vascular Morphology and Biomechanics of Traumatic Subarachnoid Hemorrhage in Acute and Chronic Alcoholism in Rats**
Hai-Peng Wang, MM; Xiao-Jun Yu, PhD; Guo-Hui Xu, MM; Yi Lu, BM*
- 4:40 p.m. - 4:55 p.m. **211** **Sudden Death Due to Colloid Cyst of the Third Ventricle and a Special Sign at Autopsy: Three Case Reports**
Serafettin Demirci, MD; Kamil Hakan Dogan, MD; Zerrin Erkol, MD; Mete Korkut Gulmen, MD*

Forensic Science Education

New Topics in Training

*Moderator: Max M. Houck, MA
West Virginia University
Morgantown, WV*

- 2:40 p.m. - 3:00 p.m. **692** **National Footwear Training in the United Kingdom**
*Shaun P. Mallinson**
- 3:00 p.m. - 3:30 p.m. **Break**
- 3:30 p.m. - 3:45 p.m. **597** **A New Model of Teaching Forensic Science at Universities**
Piotr A. Girdwoyn; Tadeusz J. Tomaszewski*
- 3:45 p.m. - 4:00 p.m. **341** **Applied Research on the Teaching Method of PBL in Forensic Pathology**
*Xinshan Chen**
- 4:00 p.m. - 5:00 p.m. **182** **Implementation of a Country Forensic Education Structure as a Foundation for Harmonizing Forensic Procedures at the National Level**
*Renato Barbosa Barbosa**

Scientific Sessions — Thursday

Law and Ethics

Moderator: *Anjali R. Swienton, MFS, JD*
SciLawForensics, Ltd.
Germantown, MD

- 9:00 a.m. - 9:30 a.m. **244** **Scientifically Flawed Forensic Opinions: A Systemic Solution to an Enduring Problem**
*Thomas L. Bohan, PhD, JD**
- 9:30 a.m. - 9:40 a.m. **133** **“Transplant Tourism:” The Indian Perspective of an International Pandemic**
Yogender S. Bansal, MBBS, MD, DHA; Harish Dasari, MBBS, MD*
- 9:40 a.m. - 10:00 a.m. **691** **Damned if You Do, Damned if You Don’t**
Karin A. Margolius, LLB, MBBCH; Judith G. Fordham, BSc, LLB*
- 10:00 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:45 a.m. **569** **Electron Microscope (SEM Analysis) in Medical Malpractice Cases**
Nur Birgen, MD; Salih Cengiz; Meltem Demir; Ozlem Ycmeli*
- 10:45 a.m. - 11:00 a.m. **383** **The Statistic of the Legislation on Brain Death in Ethnic**
*Gexin Liu**

Questioned Documents

Moderators: *Peter V. Tytell, BA*
Forensic Research
New York, NY

Robert J. Muehlberger, BA
U.S. Postal Inspection Service
Forensic Service Laboratory
Dulles, VA

- 9:00 a.m. - 9:20 a.m. **167** **Counterfeit Currency**
Meenakshi Mahajan, PhD; Visheshwar Sharma, MSc*
- 9:20 a.m. - 9:40 a.m. **377** **Application of the Raman Spectroscopy and μ -XRF Method Examination of Laser Printer Toners**
Che Xu, Yiwen Luo, Xu Yang, Shaopei Shi, Jianhua Xi, Xinwei Bian, Weilong Sun*
- 9:40 a.m. - 10:15 a.m. **17** **Determination of Paper Types and Additives Using Direct Analysis in Real Time Mass Spectrometry (DART-MS)**
*Jeanette Adams, PhD**
- 10:15 a.m. - 10:50 a.m. **Break**
- 10:50 a.m. - 11:05 a.m. **534** **Examination of Secondary Latent Type Impressions – A Novel Method**
Meenakshi Mahajan, PhD; Visheshwar Sharma, MSc; Satya Prakash Arya, PhD*
- 11:05 a.m. - 11:35 a.m. **636** **Reflection Transformation Imaging (RTI) and 3D Evidence Capture**
*Elaine X. Wooton**
- 11:35 a.m. - 11:50 a.m. **378** **The Microscopic Characteristics of the Crossing Area in Sequencing of Stamp Impressions and Written/Printed Words**
Xu Yang; Shaopei Shi; Che Xu; Huangui Qian*
- 11:50 a.m. - 12:00 p.m. **Questions and Discussion**

Scientific Sessions — Thursday

Moderators: *Peter V. Tytell, BA*
Forensic Research
New York, NY

Robert J. Muehlberger, BA
U.S. Postal Inspection Service
Forensic Service Laboratory
Dulles, VA

1:00 p.m.	-	1:30 p.m.	642	Potential Applications of Interferometry to Questioned Document Analyses <i>Andrew Barton, BSc*</i>
1:30 p.m.	-	1:50 p.m.	376	Three Issues Related to Identification of Stamp Impressions <i>Shaopei Shi, BS*</i> ; <i>Xu Yang, BS</i> ; <i>Huanggui Qian, BL</i> ; <i>Che Xu, BE</i>
1:50 p.m.	-	2:10 p.m.	395	The Study of the Relative Age of Seal Stamps by TLC <i>Shuang Hu*</i>
2:10 p.m.	-	2:40 p.m.	704	Well Founded Eliminations <i>Robert J. Muehlberger, BA*</i>
2:40 p.m.	-	3:00 p.m.		Break
3:00 p.m.	-	3:30 p.m.		Panel Discussion: Evaluation of Observations and Strength of Conclusions <i>Peter V. Tytell, BA*</i> ; <i>Robert J. Muehlberger, BA*</i>

Scientific Sessions — Friday

Computer Forensics and Digital Evidence

Moderator: *Carrie M. Whitcomb, MSFS*
National Center for Forensic Science
University of Central Florida
Orlando, FL

- | | | | | |
|-----------|---|-----------|------------|--|
| 1:30 p.m. | - | 1:50 p.m. | 26 | Computer Forensics With Improved Framework Model
<i>Sundresan Perumal*</i> ; <i>Norita Md Norwawi</i> |
| 1:50 p.m. | - | 2:20 p.m. | 138 | Video File Recovery and Playback
<i>Rikkert Zoun, MS*</i> ; <i>Zeno J. Geradts, PhD</i> |
| 2:20 p.m. | - | 2:30 p.m. | 288 | Getting Computer-Stored Evidence by Programming With .Net Framework
<i>Meng Ding, MS*</i> |
| 2:30 p.m. | - | 2:50 p.m. | 172 | Forensic Investigations on Code Protected Microprocessors
<i>Jürgen Frinken*</i> ; <i>Johann Machnik</i> |
| 2:50 p.m. | - | 3:30 p.m. | | Break |
| 3:30 p.m. | - | 4:00 p.m. | 333 | Techniques for Automating Windows Event Log Forensics
<i>Carey R. Murphey, PhD*</i> |

Crime Scene Investigation and Police Science

Moderator: *Robert A. Freed, BS*
Lansdale, PA

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|------------|---|------------|------------|---|
| 8:30 a.m. | - | 9:00 a.m. | 690 | Accreditation of Crime Scene Investigation
<i>Peter W. Pfefferli*</i> |
| 9:00 a.m. | - | 9:30 a.m. | 487 | Crime Scene Search Theory
<i>H. Dale Nute, PhD*</i> ; <i>Mark Feulner, MA</i> |
| 9:30 a.m. | - | 9:55 a.m. | 697 | Forensic Science Competence in the Police Service – Building Knowledge to Reduce Crime
<i>Samantha Frost*</i> |
| 9:55 a.m. | - | 10:15 a.m. | 681 | Raising the Standards of Professional Practice — CSIs & Fingerprint Examiners
<i>Peter Walters, BA*</i> |
| 10:15 a.m. | - | 10:30 a.m. | | Break |
| 10:30 a.m. | - | 10:45 a.m. | 644 | Palm and Foot Impressions: Their Accuracy in Reconstructing Stature
<i>Nasir Ahmed, MSc</i> ; <i>Ruma Purkait, PhD*</i> |
| 10:45 a.m. | - | 11:05 a.m. | 75 | Bloodstained Footwear Impression Enhancement: Comparison of Infrared Photography to Diaminobenzidine (DAB) Treatment
<i>James A. Bailey, PhD*</i> ; <i>Daniel J. Swart, PhD</i> |
| 11:05 a.m. | - | 11:25 a.m. | 85 | A Profile of Non-Natural Deaths in the Area of Transkei South Africa
<i>Banwari Meel, MD*</i> ; <i>Ram Prakash Kaswa, MBBS</i> |
| 11:25 a.m. | - | 11:40 a.m. | 59 | Bodies in Parcels
<i>Fawzi A. Benomran, MB, ChB, MSc, DCH, MD*</i> |

Scientific Sessions — Friday

- 11:40 a.m. - 11:55 a.m. **49** **A Case Study of Racehorse Sample Matching Using a Novel 24-plex STR Typing System**
*Jin-Wen Chen, PhD**; *Cornelius E. Uboh, PhD*; *Lawrence R. Soma, VMD*
- 11:55 a.m. - 12:15 p.m. **560** **Investigation Into a Screening Method for Trace DNA Detection at the Crime Scene**
Kate Howson, BSc; *Jennifer Raymond, BSc*; *Laszlo Szabo, PhD*;
Peter R. Gunn, PhD; *Chris J. Lennard, PhD*; *Claude P. Roux, PhD**

Criminal Profiling

Moderator: James M. Adcock, PhD
University of New Haven
West Haven, CT

- 1:00 p.m. - 1:45 p.m. **161** **Combating Child Sexual Exploitation in Colombia – Presentation of an Investigator and Crime Scene Analyst’s Manual – Guideline**
*Gloria Guzman, LD**; *Maria D. Sanchez, MD**
- 1:45 p.m. - 2:30 p.m. **375** **Self-Reported Female Consumers of Internet Child Pornography: A Psychological Analysis**
*Kathryn C. Seigfried, MA**; *Marcus K. Rogers, PhD*
- 2:30 p.m. - 2:50 p.m. **670** **Deciphering Who Killed the Prostitute Utilizing Keppel and Walter’s Revised Classification Model for Understanding Sexual Murder**
*James M. Adcock, PhD**

Drugs of Abuse

New Technologies

Moderator: Sanford A. Angelos, MS, MEd
Aris Associates, Ltd.
Chicago, IL

- 8:45 a.m. - 9:00 a.m. **711** **DESI-MS: A New Tool for Forensic Chemistry Laboratories**
*Sandra E. Rodriguez-Cruz, PhD**
- 9:00 a.m. - 9:30 a.m. **36** **Drugs of Abuse and Smuggling Techniques Used in Colombia**
*Néstor A. Gómez Guerrero, BS**
- 9:30 a.m. - 10:00 a.m. **603** **Direct Multi-Analyte Detection of Contact Residues and Metabolites in Latent Fingerprints Using SALDI-TOF-MS-MS**
*Frederick J. Rowell, PhD**; *John Seviour, BSc*
- 10:00 a.m. - 10:30 a.m. **407** **Characterization of Carbon Paper From Illicit Drug Seizures**
Laura Bowen, BSc; *Claude P. Roux, PhD**; *Philip Maynard, PhD*;
Juuso Huttunen, PhD
- 10:30 a.m. - 11:00 a.m. **Break**

Scientific Sessions — Friday

Phenethylamines

- 11:00 a.m. - 11:30 a.m. **559** **Global Warning: Internet Open Access to Designer Drugs and Chemical Cocktails**
*Laura A. Ciolino, PhD**; *Tracy L. Ranieri, BS*; *Angie S. Mohrhaus, BS*;
Heather A. McCauley, BS
- 1:00 p.m. - 1:20 p.m. **147** **"Party Pills," "Legal Highs," and Drug Control Policy: The New Zealand Experience**
*Keith R. Bedford, PhD**
- 1:20 p.m. - 1:40 p.m. **114** **Study on Small Volume Liquid Extraction of Amphetamines**
*Pinjia Meng, PhD**; *Yanyan Wang*; *Dan Zhu, MS*
- 1:40 p.m. - 2:00 p.m. **505** **Effect of Chronic Amphetamine on Locomotor Activity in Dopamine D3 Receptor Deficient Mice**
*Liping Chen, PhD**; *Qiaofang Hou, PhD*; *Teng Chen, PhD*; *Junyan Zhu, MS*;
Lin Li, MS; *Shengbin Li, PhD*
- 2:00 p.m. - 2:20 p.m. **616** **Emerging Use of Isotope Ratio Mass Spectrometry as a Tool for Discrimination of MDMA by Synthetic Route**
*Hilary S. Buchanan, MSc**; *Niamh Nic Daeid, PhD*; *Wolfram Meier-Augenstein, PhD*;
Helen F. Kemp, PhD; *William J. Kerr, PhD*; *Michael Middleditch, PhD*
- 2:20 p.m. - 2:40 p.m. **Break**
- 2:40 p.m. - 3:00 p.m. **658** **Analysis of Designer Drugs of the Amphetamine Type by Fast Gas-Chromatography-Mass Spectrometry**
*Dariusz Zuba**; *Bogumiła Byrska, MSc*
- 3:00 p.m. - 3:30 p.m. **216** **Synthetic Drug and the Colombian Experience**
*Campo Elias Vasquez**
- 3:30 p.m. - 3:50 p.m. **583** **Methods for the Detection of Illicit Substances in Latent Fingerprints by Infrared Spectral Imaging**
Ping Hei Ng, BSc; *Sarah Walker, BSc*; *Mark Tahtouh, BSc*; *Brian J. Reedy, BSc, PhD**
- 3:50 p.m. - 4:05 p.m. **607** **Research on Tracing the Source of Drugs by Plastic Bags Analyzed by FTIR**
*Jing Yu**

Engineering Sciences

Moderator: *Thomas L. Bohan, PhD, JD*
MTC Forensics
Peaks Island, MD

- 3:55 p.m. - 4:20 p.m. **512** **First Forensic Applications of the Dual Beam Technique SEM/FIB**
*Gabriele M. Gorzawski**; *Marilen I. Franke*; *Michael Gilberg*
- 4:20 p.m. - 4:35 p.m. **226** **Rupture of Cataguases Dam on March 29, 2003**
*Alan de Oliveira Lopes**

Scientific Sessions — Friday

Forensic Anthropology and Human Identification

Moderator: *John A. Williams, PhD*
Anthropology & Sociology
Western Carolina University
Cullowhee, NC

- 8:30 a.m. - 8:50 a.m. **195** **Age Estimation With Limb Joint Radiographs in Living Chinese Teenagers**
Guangyou Zhu, MS; Ya-hui Wang**
- 8:50 a.m. - 9:05 a.m. **544** **An Investigation Into the Individuality of Human External Ear Pattern: Its Application in the Field of Personal Identification**
*Ruma Purkait, PhD**
- 9:05 a.m. - 9:20 a.m. **67** **Anthropologic and Photographic Identification Process of Fragmented Bodies**
Oscar A. Plaza, MD; William Torres*
- 9:20 a.m. - 9:40 a.m. **158** **The Development of Forensic Anthropology in Albania**
Bardhyl Cipi, MD; Besim Ymaj, DrSci*
- 9:40 a.m. - 9:55 a.m. **385** **Gene Flow and Evolution Relationship in Ten Minority Populations of Yunnan by Using Nine Short Tandem Repeat Loci From China**
Kuang Wen-Jian, PhD; Zhang Hong-Bo, PhD; Zhang Lin-Lin, MFS; Yu Bing, PhD; LI Sheng-Bin, PhD*
- 9:55 a.m. - 10:10 a.m. **492** **Morphological, Chemical, and Molecular Biological Methods of Human Age Estimation**
Jiri Sajdok, Ing, PhD; Alexander Pilin, MD, PhD; Filip Auinger, Ing; Jarmila Zidkova, RNDr, PhD; Frantisek Pudil, Ing, PhD*
- 10:10 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:50 a.m. **585** **Research on the Walking Plantar Pressure Distribution of Young People Under Different Shoe Wearing Conditions**
*Chengqing Tang, MS**
- 10:50 a.m. - 11:05 a.m. **126** **Stature Estimation From Digital Radiographically Determined Length of Long Bones of the Upper Extremity**
Xiaorong Zhou, MS; Zhenhua Deng, MS*
- 11:05 a.m. - 11:20 a.m. **386** **The Character of mtDNA in the Coding Region for 12S RNA and 16S RNA of Different Races**
Ma Yi, PhD; Qingbo Liu, PhD; Ya Tuo, PhD; Linlin Zhang; Li Sheng-Bin, PhD*
- 1:30 p.m. - 1:50 p.m. **574** **The Research on the Relationship of Foot Pressure on Left and Right Feet of Young People Walking Normally**
*Chengqing Tang, MS**
- 1:50 p.m. - 2:05 p.m. **165** **The Sky in the Eye - Exact Determination of Year of Birth in Unidentified Corpses Using the Eye Lens**
Niels Lynnerup, MD, PhD; Henrik Kjeldsen, MSc; Steffen Heegaard, MD, DMS; Christina Jacobsen, MD; Jan Heinemeier, MSc, PhD*

Scientific Sessions — Friday

Forensic Biology, DNA Profiling, and Serology

Moderator: *Karolyn L. Tontarski, MS*
Decatur, GA

- 8:30 a.m. - 8:50 a.m. **272** **Validation of Luminol as Technical Detection in Blood Stain on Different Media and Under Different Operating Environment for Forensic Science**
*Aura Lizarazo**
- 8:50 a.m. - 9:15 a.m. **150** **Elimination Databases at the Institute of Environmental Science and Research — Auckland, New Zealand**
*Olivia J. Samson, MSC, BMLSc**
- 9:15 a.m. - 9:35 a.m. **667** **A Cold Hit. . . Relatively Speaking**
*George J. Schiro, Jr., MS**
- 9:35 a.m. - 9:50 a.m. **668** **Development of Biological Resources for Pathogen Identification in Microbial Forensic Investigations**
Phillip C. Williamson, PhD; Bruce Budowle, PhD*
- 9:50 a.m. - 10:20 a.m. **Break**

Moderator: *Anjali R. Swienton, MFS, JD*
SciLawForensics, Ltd.
Germantown, MD

- 10:20 a.m. - 10:35 a.m. **105** **The Effects of Scavenging by Native Animals on Decompositional Rates in Western Australia**
R. Christopher O'Brien, MFS; Shari Forbes, PhD; Jan Meyer, PhD; Ian Dadour, PhD*
- 10:35 a.m. - 11:10 a.m. **163** **The Application of Digital Imaging and Image Analysis to the Numerical Features of Hair in Forensic Hair Examinations**
Elizabeth M. Brooks, MApSc; Jan McNaught, PhD; James Robertson, PhD*
- 11:10 a.m. - 11:30 a.m. **265** **Morphologic Comparison Between Human and Domestic Animal Spermatozoa With the Use of Christmas Tree Coloration**
Aura Lizarazo; Johanna Martinez; Ana Rodriguez*
- 11:30 a.m. - 11:50 a.m. **186** **Evaluation of Reliability of STR Typing in Human Colon Carcinomas Tissues Used for Identification Purposes**
Li Chengtao, PhD; Fang Jianxin; Guo Hong; Lin Yuan; Lin Yan; Que Tingzhi; Li Li*

Moderator: *George J. Schiro, Jr., MS*
Acadiana Criminalistics Lab
New Iberia, LA

- 1:30 p.m. - 1:50 p.m. **145** **Developmental Validation of a Real-Time PCR Assay for the Quantitation of Total Human and Male DNA**
Curtis D. Knox, BS; Benjamin Krenke, MS; Cynthia Sprecher, BS; Nadine Nassif, MS; Melissa Schwandt, PhD; Doug Storts, PhD*
- 1:50 p.m. - 2:10 p.m. **176** **Utility of the Quantifiler® Duo DNA Quantification Kit in Forensic Case Work**
*Maura Barbisin, PhD; Cristin E. O'Shea, BS; Lisa M. Calandro, MPH; Jaiprakash G. Shewale, PhD; Manohar R. Furtado, PhD**
- 2:10 p.m. - 2:30 p.m. **142** **Validation of Two DNA Quantification Methods in Various Forensic Testing Conditions**
*Rocio del Pilar Lizarazo Quintero**

Scientific Sessions — Friday

- 2:30 p.m. - 2:50 p.m. **227** **Different Effects of PCR Inhibitors on Multiplex STR Assays**
*Dennis Y. Wang, PhD**; *Julio J. Mulero, PhD*; *Lori K. Hennessy, PhD*
- 2:50 p.m. - 3:20 p.m. **Break**
- Moderator: *Christina Mulligan*
Cedar Crest College
Allentown, PA
- 3:20 p.m. - 3:35 p.m. **358** **STR Database in the Chinese Nations From China**
*Yang Li, PhD**; *Gui Hong-Sheng, MS*; *Hou Qiao-Fang, PhD*; *Zhang Tian-Xiao, MS*;
Lai Jiang-Hua, PhD; *Chen Teng, PhD*; *Yu Bing, PhD*; *Li Sheng-Bin, PhD*
- 3:35 p.m. - 3:40 p.m. **408** **Genetic Analysis and Phylogenetic Relationships of Chinese Populations Using Y-STRs**
*Meisen Shi, PhD**; *Di Lu, MD*; *Li Yuan, PhD*; *Lin Chang, MD*; *Xue Yang*
- 3:40 p.m. - 4:00 p.m. **66** **Genetic Population Analysis of 17 Y-Chromosomal STRs in Three Departments (Valle del Cauca, Cauca, and Nariño) From Southwestern Colombia**
*Sandra J. Avila, MSc**; *Ignacio Briceño, PhD*; *Alberto Gomez, PhD*
- 4:00 p.m. - 4:20 p.m. **558** **Analysis of the SE33 Hypervariable Microsatellite Locus (HumACTBP2) in Colombian Populations**
Manuel Paredes; *Lilia Laverde, MSc**
- 4:20 p.m. - 4:35 p.m. **354** **HLA-A, B, and DRB1 Gene Polymorphisms in Hui Ethnic Group of Ningxia Province From China**
*Shen Chun-Mei, PhD**; *Gao Fang, PhD*; *Wei Shu-Guang, PhD*; *Zhang Hong-Bo, PhD*;
Zhu Bo-Feng, PhD; *Li Sheng-Bin, PhD*

Forensic Entomology

Moderator: *Neal H. Haskell, PhD*
Rensselaer, IN

- 1:30 p.m. - 1:45 p.m. **353** **Study of Diptera Succession on Pig Carrion in an Urban Area in Malaysia**
*Ikhwan Zakaria, MSc**; *Johari Surin, PhD*; *Baharudin Omar, PhD*; *Edah M. Aris, MSc*
- 1:45 p.m. - 2:05 p.m. **672** **Two Forensic Entomology Case Studies Where Temperature Thresholds Were Used to Identify Precise and Specific Times of Insect Activity on the Victims**
*Neal H. Haskell, PhD**

Forensic Pathology

Moderator: *James G. Young, MD*
Wyevale, Ontario
Canada

- 9:00 a.m. - 10:00 a.m. **22** **The Boiling Technique: A Method for Obtaining Quality Postmortem Impressions From Deteriorating Friction Ridge Skin**
*Aaron Uhle, MS**; *Richard Leas*
- 10:00 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:45 a.m. **635** **The Banana Case – Microbial Genotyping**
*Inge Morild, MD, PhD**; *Rebecca Breistein*; *Haima Mylvaganam, MD*

Scientific Sessions — Friday

- 10:45 a.m. - 10:55 a.m. **403** **The Time-Dependent Expressions of IL-1 β , COX-2 and MCP-1mRNA on- Blunt Contusion Wounds of Rabbit Skins and the Research on Estimation of Wound Age in the Future**
*Rufeng Bai, PhD**; *Haidong Zhang, MD*; *Fengqin Zhang, MD*;
Lin Chang, MD; *Dawen Mu*
- 10:55 a.m. - 11:15 a.m. **617** **Why Are Autopsy Rates Falling in Hong Kong?**
*Philip S.L. Beh, MBBS, DMJ**

Forensic Psychiatry

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

- 3:30 p.m. - 4:15 p.m. **101** **Study of Serial Homicide Cases in Colombia**
*Oscar Diaz**
- 4:15 p.m. - 4:35 p.m. **6** **Towards a Better Understanding of Asian Youth Gangs: Rising Epidemic Confronting Our Communities**
*Cliff Akiyama, MA**
- 4:35 p.m. - 4:50 p.m. **184** **Standard Assessment of Criminal Responsibility in the Mentally Disordered Offenders in China**
*Weixiong Cai, MD**
- 4:50 p.m. - 5:10 p.m. **183** **Civil Competence Assessment of the Mentally Disordered Involved Contract Dispute**
*Qinting Zhang, MM**; *Yanxia Pang**
- 5:10 p.m. - 5:30 p.m. **250** **Ninety-One Cases Follow-Up Study of Mental Injury Compensation Suits**
*Xueyi Xing, MS**; *Changsuo Ma, MS*; *Lin Chang, MS*

International Symposium on Forensic Science Education

Forensic science education is key to the quality of the profession. Despite efforts to improve and accredit academic programs, many institutions have created degrees that do not serve the interests of their students. Various aspects of forensic science are unique and require additional attention by legitimate educators, such as the balancing of theory and practice. This session will address central issues in international forensic science education with invited papers by noted academics and professionals from around the world.

Moderator: *Max M. Houck, MA*
West Virginia University
Morgantown, WV

- 8:30 a.m. - 9:00 a.m. **Welcoming Remarks**
Max M. Houck, MA
West Virginia University
Morgantown, WV
- 9:00 a.m. - 9:30 a.m. **The Need for Practitioners in Academic Programs**
Lawrence A. Quarino, PhD
Cedar Crest College
Allentown, PA
- 9:30 a.m. - 10:00 a.m. **Quantitative Assessment of the Growth, and Its Affects, of Forensic Science**
Glen P. Jackson, PhD
Ohio University
Athens, OH

Scientific Sessions — Friday

10:00 a.m. - 10:30 a.m.	Break
10:30 a.m. - 11:00 a.m.	Educational Developments in Forensic Medicine in the United Kingdom <i>Ian F. Wall</i> <i>Clinical Forensic & Legal Medicine</i> <i>The Royal Society of Medicine</i> <i>London, United Kingdom</i>
11:00 a.m. - 11:30 a.m.	Cold Cases and the Utilization of Forensic Science Graduate Students to Review and Evaluate Homicides <i>Sarah L. Stein, MFS</i> <i>Center for the Resolution of Unresolved Crimes</i> <i>West Haven, CT</i>
11:30 a.m. - 12:00 p.m.	Impression Evidence and Crime Scene Investigation: Meeting the Requirements of a B.S. Curriculum <i>Keith B. Morris, PhD</i> <i>West Virginia University</i> <i>Morgantown, WV</i>
1:30 p.m. - 2:00 p.m.	Undergraduate Education in Forensic Science: An International Perspective <i>Sheri L. Forbes, PhD</i> <i>University Ontario Institute of Technology</i> <i>Oshawa, Ontario, Canada</i>
2:00 p.m. - 2:30 p.m.	Dr. CSI: Is There a Need for a PhD in Forensic Science? <i>Max M. Houck, MA</i> <i>West Virginia University</i> <i>Morgantown, WV</i>
2:30 p.m. - 3:00 p.m.	Quality and Impact of Forensic Science Research – Mickey Mouse or Nobel Prize? <i>Claude P. Roux, PhD</i> <i>University Technology Sydney</i> <i>New South Wales, Australia</i>
3:00 p.m. - 3:30 p.m.	Break
3:30 p.m. - 4:00 p.m.	Closing Remarks <i>Max M. Houck, MA</i> <i>West Virginia University</i> <i>Morgantown, WV</i>

Mass Disaster Victim Identification

Moderator: John A. Williams, PhD
Anthropology & Sociology
Western Carolina University
Cullowhee, NC

3:30 p.m. - 4:00 p.m.	624	Management of Dead in Mass Disasters – South Asian Perspectives <i>Clifford Priyantha Perera, MD, LLB, DMJ*</i>
4:00 p.m. - 4:15 p.m.	240	The Airport 2007 <i>Petr Bendl; Alexander Pilin, MD, PhD*; Milos Sokol, MD, PhD; Pavel Zikmund, Ing</i>
4:15 p.m. - 4:30 p.m.		Questions & Discussion

Scientific Sessions — Friday

Other

Moderator: *Joseph P. Bono, MA*
Indiana University Purdue University Indianapolis
Indianapolis, IN

- 8:30 a.m. - 9:15 a.m. **30** **"You Got My Maggot Upside Down!" Publication From Idea to Market**
*Becky A. Masterman, MA**
- 9:15 a.m. - 9:45 a.m. **563** **Back to Basics – Is the 21st Century Focus on Technology Over-Shadowing Good Forensic Science?**
*Claude P. Roux, PhD**; *James Robertson, PhD*; *Chris J. Lennard, PhD*;
Simon J. Walsh, MSc
- 9:45 a.m. - 10:05 a.m. **695** **Applications of Mobile GC/MS and Hand-Held Air Sampling in Forensic Analysis**
*Garth Patterson, PhD**; *Cynthia Liu, PhD*; *John Grossenbacher, PhD*;
Donna Powell, BS; *Jane Likens, BS*; *J.M. Wells, PhD*; *Dennis Barket, PhD*
- 10:05 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:45 a.m. **489** **Characterization of Chemical Markers of Decomposition for Geoforensics**
Lisa Swann, BSc; *Shari L. Forbes, PhD**; *Simon W. Lewis, PhD*; *Geoff Chidlow, BSc*
- 10:45 a.m. - 11:00 a.m. **116** **Forensic Botany: Vegetation Associated With Grave Sites in Southern Ontario**
*Chris J. Watson, BSc**; *Shari L. Forbes, PhD*
- 11:00 a.m. - 11:10 a.m. **490** **Forensic Science in the Continental and Anglo-American Systems of Law**
*Karolina E. Kremens, LL.M.**
- 11:10 a.m. - 11:30 a.m. **562** **Hydrogen Cyanide: Is it Overtaking Carbon Monoxide as the Silent Killer in Domestic Dwelling Fires?**
*Katharine M. Grimwood, BSc**; *Brian Reedy, PhD*
- 11:30 a.m. - 12:20 p.m. **112** **Childhood Interrupted**
*Olga Lucía Barragán**; *Francisco Javier Valencia**; *Yolanda Clavijo Bolivar*

Moderator: *Peter R. De Forest, DCrim*
John Jay College/CUNY
New York, NY

- 1:30 p.m. - 1:50 p.m. **467** **Population Study of 17 Y-STR Loci in Colombian Caribbean Coast Population and Forensic Application**
*Rosa E. Romero, MSc**; *Ignacio Briceno, PhD*; *Rocio Lizarazo, MSc*;
Albert Gomez, PhD
- 1:50 p.m. - 2:05 p.m. **115** **The Biochemical Alteration of Soil by Decomposition Products**
*Laura A. Benninger, BSc**; *Shari L. Forbes, PhD*; *David O. Carter, PhD*
- 2:05 p.m. - 2:20 p.m. **198** **The Potential Application of Grave Soil Analysis in the Determination of Post-Burial Interval**
*Sonja L.N. O'Brien, BSc**; *Shari L. Forbes, PhD*
- 2:20 p.m. - 2:35 p.m. **214** **What's Not Working Within 'What Works': Executive Cognitive Functioning Capacity of First Time Federal Offenders, Return Offenders, and Controls**
*Erin H. Ross, MSc**; *Jenny Neil, BA*; *Peter N.S. Hoaken, PhD*
- 2:35 p.m. - 3:00 p.m. **701** **The Mass Graves Investigation Team in Iraq: Challenges in Forensic Archaeology**
*Michael K. Trimble, PhD**; *Nancy J. Brighton, MA*

Scientific Sessions — Friday

3:00 p.m. - 3:30 p.m.

Break

3:30 p.m. - 3:55 p.m.

702

The Application of GIS in Forensic Archaeology: Karbala, Iraq
*Mark A. Smith, PhD**

Quality Assurance and Laboratory Management

*Moderator: Stephanie Reilander, MA
Centre of Forensic Sciences
Toronto, Ontario
Canada*

1:30 p.m. - 3:15 p.m.

721

Panel Discussion: International Issues in Forensic Science Laboratory Accreditation

*Ralph M. Keaton, Executive Director
American Society of Crime Laboratory Directors – Laboratory Accreditation Board (United States)*

*Irma Rios, Crime Laboratory Director
Houston Police Department (United States)*

*Edward Ngokha, Assistant Commissioner
South African Police Service, Forensic Science Laboratory (South Africa)*

*Justice Tettey, Chief, Laboratory and Scientific Section
United Nations Office on Drugs and Crime (Austria)*

*Zhaoming Guo
Institute of Evidence Law and Forensic Science
Chinese University of Political Science and Law (China)*

481

The General Situation of Accreditation for Forensic Science Laboratories in China

Zhaoming Guo; Rufeng Bai*

3:15 p.m. - 3:30 p.m.

Break

3:30 p.m. - 4:00 p.m.

715

ASCLD/LAB's Guiding Principles of Professional Responsibility

*Kenneth E. Melson, JD**

4:00 p.m. - 4:15 p.m.

599

Proficiency Testing for Imaging and Audio Enhancement: Guidelines for Evaluation

Reva Schwartz, MA; Alice C. Thomas, MS; Joseph Campbell, PhD; Wade Shen, MS*

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

34

The Evolution of Forensic Proficiency Testing: From Science Based to Policy Driven

Douglas M. Lucas, DSc; Charles G. Leete, BA*

4:30 p.m. - 4:45 p.m.

Questions & Discussion

Scientific Sessions — Friday

Questioned Documents

Moderators: *Peter V. Tytell, BA*
Forensic Research
New York, NY

Robert J. Muehlberger, BA
U.S. Postal Inspection Service
Forensic Service Laboratory
Dulles, VA

- 9:00 a.m. - 9:20 a.m. **548** **Forensic Study of Realty Male and Female Handwriting in Egypt**
*Elyan Abd El-Wa Hassan, BA**
- 9:20 a.m. - 9:40 a.m. **380** **Characteristic Features of Handwritings and Signatures Counterfeited by Copying**
*Dumitrescu G. Cristian**
- 9:40 a.m. - 10:00 a.m. **Questions & Discussion**
- 10:00 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 11:00 a.m. **552** **Evaluation of the Individuality of Handwriting Using FLASH ID™ – A Totally Automated, Language-Independent System for Handwriting Identification**
Mark A. Walch, MPH; Donald T. Gantz, PhD*; John J. Miller, PhD; Linda J. Davis, PhD; Christopher P. Saunders, PhD; Mark J. Lancaster, PhD; Andrea Lamas, BS; JoAnn Buscaglia, PhD**
- 11:00 a.m. - 11:30 a.m. **Questions & Discussion**
- 1:30 p.m. - 4:30 p.m. **525** **An Introduction to Typography for the Forensic Document Examiner**
*Peter V. Tytell, BA**

Scientific Historiography / Forensic Archaeology

Moderator: *John A. Williams, PhD*
Anthropology & Sociology
Western Carolina University
Cullowhee, NC

- 2:05 p.m. - 2:25 p.m. **588** **The Study on the Distribution Pattern of Centerline of Plantar Pressure in Walking**
Jiaying Dong, BS; Chengqing Tang, MS*
- 2:25 p.m. - 2:45 p.m. **589** **The Testing of the Reliability of Gait Impression Theory Through Plantar Pressure Distribution**
Limin Shi, BS; Chengqing Tang, MS*
- 2:45 p.m. - 3:00 p.m. **323** **The Historic and Realistic Significance of “The Washing Away of Wrongs”**
*Xinshan Chen, MD**

Scientific Sessions — Friday

Toxicology

Moderator: *Susan Howe, DVM, PhD*
Tarrant County Medical Examiner's Office
Fort Worth, TX

- 9:00 a.m. - 9:30 a.m. **371** **The Introduction of Forensic Toxicokinetics**
*Keming Yun, PhD**
- 9:30 a.m. - 9:45 a.m. **248** **Study on the Elimination Rate of Blood Alcohol and Estimation of Blood Alcohol Concentration for the Chinese Population**
*Xianyi Zhuo**
- 9:45 a.m. - 10:00 a.m. **400** **Study on the Postmortem Redistribution of Lidocaine in Anesthesia Accident Death Dogs**
Zhiwen Wei, MS; Keming Yun, MD*
- 10:00 a.m. - 10:30 a.m. **Break**
- 10:30 a.m. - 10:45 a.m. **471** **Why Do We Need Environmental Toxicology Studies?**
Mete K. Gulman, MD; Salim Y. Inan, MD*
- 10:45 a.m. - 11:00 a.m. **511** **Importance of Hair Analysis for Cukurova Region**
Dilek Battal, MD; Mete K. Gulman, MD; Ahmet Hilal, MD*
- 11:00 a.m. - 11:20 a.m. **526** **Implications of Oral Fluid Testing in DUID Cases**
Jeffrey P. Walterscheid, PhD; Terry J. Danielson, PhD; Ashraf Mozayani, PhD; Luis A. Sanchez, MD*
- 11:20 a.m. - 11:40 a.m. **232** **LC-MS-MS Analysis of Aconite Alkaloids in a Fatal Poisoning Case**
Wei Liu, BS; Min Shen*
- 11:40 a.m. - 11:50 a.m. **364** **Multi Target Screening for >600 Drugs by Qtrap LC-MS-MS and Library Searching**
Sebastian Dresen, Ing; Nerea Ferreiros, PhD; Wolfgang Weinmann, MD*
- 11:50 a.m. - 12:00 p.m. **Questions & Discussion**

Traffic Medicine

Moderator: *Ian F. Wall, DMJ, DO*
Royal Society of Medicine
London, United Kingdom

- 4:35 p.m. - 4:55 p.m. **13** **Forensic Examiner Appraisal Evidence of Traffic Trauma**
*Jai Congxian**
- 4:55 p.m. - 5:10 p.m. **217** **The Injuries Caused by the Seat Belts Through the Deformation of the Seats**
Yoshihiro Motomiya; Tatsuya Ishibashi*

Scientific Sessions — Friday

Victims of Torture and Genocide

Moderator: *Nizam Peerwani, MD*
Tarrant County Medical Examiner's Office
Fort Worth, TX

- | | | | | |
|------------|---|------------|------------|---|
| 8:30 a.m. | - | 8:45 a.m. | 596 | Bankart Lesion After Suspension Torture
<i>Sebnem R. Korur-Fincanci, MD*</i> ; <i>Oguzhan Ekizoglu, MD</i> ; <i>Kerem Bilsel, MD</i> |
| 8:45 a.m. | - | 9:00 a.m. | 598 | Estimation of Wound Age in Falanga Torture
<i>Sebnem Korur-Fincanci, MD*</i> ; <i>Oguzhan Ekizoglu, MD</i> ; <i>Gurcan Altun, MD</i> ;
<i>Gulay Durmus-Altun, MD</i> |
| 9:00 a.m. | - | 9:30 a.m. | 626 | Impact of Istanbul Protocol on Improving Documentation of Torture – Sri Lankan Experience
<i>Clifford Priyantha Perera, MD, LLB, DMJ*</i> ; <i>Alice Verghese</i> |
| 9:30 a.m. | - | 10:00 a.m. | 509 | Investigative and Forensic Approach to Enforced Disappearance in Colombia
<i>Jacqueline Rodriguez*</i> |
| 10:00 a.m. | - | 10:30 a.m. | | Break |
| 10:30 a.m. | - | 11:15 a.m. | 718 | A Global Perspective on Human Rights' Investigation
<i>Nizam Peerwani, MD*</i> |
| 11:15 a.m. | - | 11:35 a.m. | 477 | Rwandan Genocide 1994 – A Case Including Crime Scene Investigation, Autopsies, and Clinical Forensic Medicine in 2006
<i>Steen H. Hansen, MD*</i> |
| 11:35 a.m. | - | 12:05 p.m. | 693 | The Role of Forensic Experts in the Prevention of Torture and Inhuman or Degrading Treatments
<i>Stan Cristian*</i> |

Workshops

#1 Microfluidics: Advancing Forensic DNA Analysis

Monday, July 21, 2008

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

The development of bioanalytical microdevices for genetic analysis has reached a point where the “lab-on-a-chip” (LOC) or micro-total analysis system (μ TAS) concept set forth almost 20 years ago is now rapidly becoming a reality. This microfluidic technology stands to revolutionize the way forensic DNA analysis is accomplished, incorporating sample preparation steps such as cell sorting, DNA purification, and PCR amplification, with microchip electrophoresis in multi-purpose, multi-functional devices capable of total, rapid, and automated genotyping. A fully-integrated, microchip capable of performing the steps normally carried out at the bench would not only reduce the time required to perform these tasks, but would also eliminate user intervention and potential sources of contamination, preserving more of the sample for future analysis. Optimization of these devices for forensic analyses, however, presents a distinctive set of challenges. Due to the multi-step nature of the forensic DNA analysis process, careful consideration must be given to solution compatibility, sample size, and fluidic interfacing in order to seamlessly integrate these technologies. As the field stands on the cusp of the commercialization of microfluidic systems, the forensic community is provided with the unique opportunity to drive the final design of what promises to be a revolutionary change to the way these analyses are carried out.

This workshop will provide the attendee with a comprehensive overview of the current state of development of microfluidics for forensic DNA analysis, a foundation for understanding the principles of microfluidics and how current DNA processing methodologies are being translated to the microscale. Additionally, the role of microfluidic systems and practical considerations for their application in forensics labs and in portable genetic analysis systems will be discussed. The attendee will also gain an appreciation of this new technology, its limitations, and the unlimited potential of its application and use in the forensic laboratory. Finally, a view of the future of advanced microscale analytical systems their potential design and use will be presented.

Faculty:

Joan M. Bienvenue, BS, MS, PhD
Armed Forces DNA Identification Laboratory
1413 Research Boulevard
Rockville, MD 20850

James P. Landers, BS, PhD
University of Virginia, Department of Chemistry
McCormick Road
Charlottesville, VA 22904

#2 Introduction to AFIS Systems

Monday, July 21, 2008

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

This workshop will demonstrate the applicability of Automated Fingerprint Systems (AFIS) in a small agency. Attendees will gain hands-on experience in the utilization of a system which will include the entry of both ten-prints and latents. The searching against the AFIS database and the evaluation of results will also be introduced.

The target audience is for all levels who are contemplating the introduction of small AFIS systems or those who would like to hone their skills on AFIS Systems.

Techniques for the improvement of searching criteria and evaluation of the system stability will also be introduced.

Interested persons may bring electronic versions of their ten-prints and latents for testing purposes.

Faculty:

Keith B. Morris, PhD
Forensic & Investigative Science
West Virginia University
PO Box 6121
Morgantown, WV 26506-6121

Restricted Audience Size: 20

#3 ISO Without Tears

Monday, July 21, 2008

8:00 a.m. - 3:00 p.m.

Many forensic science laboratory managers are working to prepare for future accreditation to the ISO/IEC 17025 standards. In many cases their agencies have been audited or accredited with respect to other standards and criteria, but ISO 17025 seems to have special significance—and the phrase “ISO Accreditation” often provokes anxiety among even the most “audit-hardened” scientists and managers. One way to lessen anxiety and uncertainty is with knowledge and understanding. This presentation will provide that basic knowledge and understanding about “ISO accreditation” through a discussion of ISO/IEC 17025 accreditation processes and standards. The ISO hierarchy of standards and their place within forensic testing accreditation programs will be described. Guidance will be provided on key words and phrases in ISO 17025 that will assist workshop participants to understand what is required of them in order to be in conformance with the standards. Particular emphasis will be placed upon the ISO 17025 “hot spots”—those “gaps” between ISO 17025 standards and non-ISO 17025 audit or accreditation program standards that can create problems for the unaware. Suggestions for transitioning to an ISO 17025-conformant management system will also be discussed.

A native of Minnesota, Patricia Wojtowicz joined the FQS-International business unit of Forensic Quality Services, Inc. in Largo, FL, in November 2005 as its Manager of Accreditations. FQS-I offers an ISO 17025 accreditation program for public and private sector agencies involved in forensic testing that is recognized by the National Cooperation for Laboratory Accreditation (NACLA). She has a BA (Chemistry) from Augsburg College, Minneapolis, and an MSFS (Forensic Chemistry) from The George Washington University, Washington, DC. She spent 26+ years as a forensic scientist for the Virginia Bureau of Forensic Science and the Minnesota BCA Forensic Science Service in St. Paul, MN. She has been a drug chemist; trace evidence analyst; crime scene processor; DNA analyst, technical leader, and section supervisor; laboratory system Quality Manager; and accreditation inspector and DNA auditor. She is a charter member of the Association of Forensic Quality Assurance Managers (AFQAM) and a Past-President of the Midwestern Association of Forensic Scientists (MAFS).

Faculty:

Patricia C. Wojtowicz, BA, MSFS
Forensic Quality Services, Inc.
13575 58th Street North, Suite 153
Clearwater, FL 33760

#4 UV-Visible-NIR, IR and Raman Microspectroscopy for Forensic Science

Monday, July 21, 2008

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

Tuesday, July 22, 2008

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

Most forensic laboratories use an FT-IR microscope for the analysis of trace evidence. In addition, many forensic labs also have (or are budgeting for) a UV-visible-NIR microspectrophotometer and a Raman microspectrometer for the analysis of fibers and paints. There are, however, many more applications for molecular microspectroscopy in the forensic sciences. These include inks, paper, soils, glass, and drugs of abuse. This workshop will cover the types of samples that can be analyzed, basic optics and spectroscopic techniques, sample preparation techniques for each of the methods, advanced instrument usage techniques, and advanced data analysis techniques. While this class is designed for the forensic practitioner, others interested in molecular microspectroscopy will find the material of benefit as well.

Faculty:

Paul Martin, PhD, MS, BS
CRAIC Technologies
948 North Amelia Avenue
San Dimas, CA 91773

Mary Carrabba, PhD, MS, BS
Rogue River Spectroscopy, LLC
508 Gold Terrace
Rogue River, OR 97537

Mike Carrabba, PhD, MS, BS
Hach Homeland Security
Technologies
481 California Avenue
Grants Pass, OR 97526

#5 New Directions in Forensic Taphonomy - Life After Death

Monday, July 21, 2008

8:00 a.m. – 400 p.m.

After attending this workshop, attendees will have a better understanding of new developments in forensic taphonomy, specifically early postmortem decomposition, microbially-mediated processes, and the influence of environmental parameters. Furthermore, understanding the influence of taphonomy on the quality of biomolecules, and interpretation of taphonomic signals in osseous material can help improve future sample selection. Strategies for dealing with taphonomically compromised samples will be discussed.

This workshop will impact the forensic community and/or humanity by informing attendees on the wide-ranging possibilities of new taphonomic research in the forensic setting, including the relationships between decomposition, soils, and soil microorganisms.

Forensic taphonomy has been established as a valuable tool in forensic research. Recent studies both in forensic and archaeological taphonomy aim to expand the current knowledge to reveal perimortem history, offer new tools for estimating the post mortem interval and improve sample selection for and recovery of biomolecular information (e.g. DNA).

Decomposition is a vital, yet often overlooked, process for life on Earth. This process contributes to the cycling of carbon and nutrients in all terrestrial ecosystems and is primarily biologically mediated. Several recent studies have shown that the behavior and development of some of the organisms involved in decomposition can contribute to the estimation of post mortem interval, location of clandestine graves, and determination of cause of death. The main factors that regulate decomposition and how they relate to forensic taphonomy will be discussed.

After death, bones and teeth are most resistant to decay and usually survive longest. Studies in archaeological bone decay have shown that biological alteration of the bone structure can already occur within years postmortem, which makes it an interesting subject for forensic taphonomy. Of course, environmental and edaphic parameters influence the (biological) degradation of bone as well, such as rapidly fluctuating water levels and acid soils in a burial site, as will be shown in several case studies and experimental field burials in terrestrial and marine environments.

Enclosed and relatively protected within mineralized tissues are biomolecules, like DNA and proteins. Obviously, the processes that alter bone also influence the preservation and quality of these biomolecules. Biomolecular archaeologists have made progress in their attempts to understand the limits to survival of DNA, lipids and proteins in a variety of different settings and have developed tools to use this information to assess age at death (from the states of protein decay) and predict the likelihood of DNA amplification success. The usefulness of this knowledge for the forensic community will be discussed. Understanding the way in which collagen - the most important protein in bone - breaks down can help to predict the fate of bones in different burial environments. Using TEM, DSC, and amino acid analysis, decomposition of collagen is described, as well as how different burial environments will affect the rate of this process. Forensic research will benefit from what biomolecular archaeologists have learnt about the taphonomy of nucleic acids, lipids, and proteins and the role played by their local and wider survival.

DNA preservation will also be discussed in detail. It can vary as a function of the taphonomical context, but the anatomical location it is extracted from also plays a role. Post recovery DNA degradation is an important factor that must be taken into account, especially in samples that have been stored for a while. However, DNA may well be preserved in molecular niches in degraded samples, where traditional analytical methods fail to recover it. Several approaches, such as high throughput sequencing methods, are described, which enhance reliability and recovery of DNA from degraded forensic or ancient samples, allowing the yield of maximal information of degraded tissue.

Humans are important taphonomic agents, for example through embalming. The goal of embalming is to retard the processes associated with decomposition. Pre-burial treatments, such as synthetic cross-linking and heat treatment, will dramatically alter bone collagen and in doing so not only change the diagenetic trajectory of bone but also influence chances of DNA recovery. A case study, where 865 soldiers from the Korean War were embalmed in the 1950's will be discussed, describing the current state of the remains and the consequences for their identification.

Arguably, the traditional view of decomposition is that it results in the loss of information on different levels, ranging from macroscopic to molecular. However, we argue that taphonomy also adds valuable information. Deciphering early postmortem history and time since death from these indicators is a valuable approach in forensic research.

Moreover increased knowledge of taphonomy in forensic studies can inform about the quality of DNA results, aid in sample selection and improve recovery of biomolecular information.

Faculty:

Miranda ME Jans, PhD

Institute for Geo and Bioarchaeology
Vrije Universiteit
Amsterdam, Noord Holland 1081HV
The Netherlands

David O. Carter, PhD

Department of Entomology
University of Nebraska-Lincoln
Lincoln, NE 68583-0816

Matthew J. Collins, PhD

BioArCh, University of York , Biology
York YO10 5YW
United Kingdom

Franklin E. Damann, MA

National Museum of Health and
Medicine
Walter Reed Army Medical Center
Washington, DC 20306-6000

Eva-Maria Geigl, PhD

Institut Jacques MONOD, CNRS
Universities Paris 6 & 7
Paris Cedex 05 75251
France

Thomas M. Gilbert, PhD

Department of Biology
University of Copenhagen
Copenhagen DK-2100
Denmark

Hannah E. Koon, PhD

BioArCh, University of York, Biology
York YO10 5YW
United Kingdom

Odile Loreille, PhD

Armed Forces
DNA Identification Laboratory
Rockville, MDd 20850

Gordon Turner-Walker, PhD

School of Cultural Heritage Conservation
Yunlin National University of Science &
Technology
Douliou, Yunlin 640
Taiwan

#6 Ethics in the Forensic Sciences - When is the Line Crossed?

Monday, July 21, 2008

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

“Tainted Science and Testimony Leads to Re-opening of 120 Cases over Last 15 years;” “Man Freed after Serving 21 years in Prison due to Lab ‘Oversight?’;” “State Crime Lab Employee Accused of Biased Analyses and Testimony” – all headlines that can confront, and scare, legitimately practicing forensic scientists. At the heart of this fear is wondering how such events occur since inherent in the practice of forensic science is the requirement for each practitioner to be ethical. The word “ethical” can be defined merely as proper conduct. Tacitly, a failure of forensic scientists to act ethically results in serious adverse outcomes. However, while seemingly simple to define, the application of being “ethical” is somewhat more obscure. That is, when is ethical, ethical, and when is it not?

Clearly, as part of an adversarial legal system, there must be room for differences of opinion in the forensic sciences. What is not clear, however, is when such differences are so divergent that individuals’ ethics are drawn into question. In this workshop, a diverse pool of expertise has been compiled to address the role of ethics in the forensic sciences from several different perspectives with the intent of approaching an understanding when the proverbial ethical line is crossed.

The workshop will begin with a brief introduction to ethics, the role ethics plays in society and potential outcomes of unethical behavior, especially in the forensic sciences. Results of a survey on ethics in forensic science will be discussed. Presentations will further involve comparisons to canons of ethics in the related fields of medicine and law, the expectations, and limitations of being a government scientist, and lastly, the status of ethics in forensic science education.

As we move forward into the age of globalization, the forensic sciences worldwide will be under ever increasing scrutiny. In that respect, with the dissemination of information associated with the forensic sciences through such outlets as the internet, television and the print media, expectations and associated ethical issues will surface perhaps more than ever before. By meeting the issues of ethics in the forensic sciences head-on, we can hopefully be prepared for these challenges.

Faculty:

Robin Bowen, MA
West Virginia University
Forensic Science Initiative
1600 University Avenue, Room 208,
Oglebay Hall
Morgantown, WV 26505

JC Upshaw Downs, MD
Georgia Bureau of Investigation
925 A Mohawk Drive
Savannah, GA 31419;

Max Houck, MA
West Virginia University
Forensic Science Initiative
3040 University Avenue
PO Box 6217
Morgantown, WV 26506

Haskell Pitluck, JD
573 Lake Avenue
Crystal Lake, IL 60014

Anjali R Swienton, MFS, JD
SciLawForensics, Ltd
25 Walnutwood Court
Germantown, MD 20874;

Richard Vorder Bruegge, PhD
Federal Bureau of Investigation
Engineering Research Facility
Building 27958A, Pod E
Quantico, VA 22135

Michael Welner, MD
The Forensic Panel
224 West 30th Street, #807
New York, NY 10001

#7 AgEstimation Project

Monday, July 21, 2008

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

Age estimation is an important problem both in living and dead, young and adult, subjects. In the last years Cameriere and all have published several papers about age estimation methods. This workshop is an aid in the knowledge and understanding of the techniques used with an easy and fast visualization of all the necessary points for their application.

Adobe® Photoshop® is used for this method to determinate the area of the pulp chamber of a canine and it's entire area. This two variable, together with the sex variable, are inserted in the regression formulae to evaluate chronological age of a living or dead adult subject.

Faculty:

Roberto Cameriere, PhD
Istitute Legal Medicine, University of
Macerata
Via Don Minzoni, 9
Macerata 62010
Italy

Danilo De Angelis, MD
Istitute Of Legale Medicine, University
of Milan
Via Mangiagalli
Milan 20133
Italy

Francesco Scarpino, MD
Istitute of Legale Medicine
University of Macerata
Via Don Minzono
Macerata 62010
Italy

#8 Mass Fatality Response Preparation Workshop

Tuesday, July 22, 2008

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

Discover value in mass fatality response planning

A mass fatality is situation where there are multiple deaths exceeding the routine capability of local resources. The mass fatality will vary in size based on the capacity of the local resources. If requested, the Federal Government may provide limited assistance but the local jurisdiction(s) is/are still in charge and must manage the incident. History has shown that families want answers immediately. Does your jurisdiction have a comprehensive and effective Mass Fatality Response Plan?

A team of experienced professionals will assist you in understanding the need for mass fatality planning. Topics will include body recovery, morgue operations, Victim Identification Program (VIP) software and integration, family assistance center operations, DNA collection, testing and identification operations and funding challenges.

Introductory presentations will be followed by a brief table top exercise which will effectively raise the level of awareness as to the actual state of readiness within the participant's organization/jurisdiction.

Faculty:

Amanda C. Sozer

Sozer, Niezgoda and Associates, LLC
407 Crown View Drive
Alexandria, VA 22314

Arbie Goings

Sozer, Niezgoda and Associates, LLC
407 Crown View Drive
Alexandria, VA 22314

Tammy Northrup, JD

Coroner Forensic Science Center
St. Tammany Parish
550 Brownswitch Road
Slidell, LA 70458

Julia Powers, MA, MS

Orleans Parish Coroner's Office
2612 Martin Luther King Jr. Blvd
New Orleans, LA 70113-2828

Don Bloom

1317 North Road
Niles, OH 44446

#9 Forensic Investigation of Fire Deaths- Accidental and Homicide

Tuesday, July 22, 2008

8:00 a.m. - 3:00 p.m.

This presentation will illustrate how the human body burns for arson and death investigators. The lecture will cover topics of accidental fires and normal burn patterns as it applies to forensic casework, and features of homicide, particularly identification of traumatic injury (ballistic, blunt force, and sharp force trauma) for differentiating manner of death between accidental or criminal attempts to destroy evidence of the body with fire. Dr. Pope has lectured to state chapters of the International Association of Arson Investigators for New York, Florida, Arizona, Oregon, Connecticut, South Carolina, North Carolina, Indiana, Colorado, and Arkansas. She has taught Forensic Anthropology, Criminalistics, and Forensic Taphonomy at the University of Arkansas in the Anthropology Department, Northwest Arkansas Community College, and consults on forensic cases involving skeletal or burned human remains for the Arkansas State Medical Examiner's Office.

Faculty:

Elayne J. Pope, PhD
University of Arkansas
330 Old Main
Fayetteville, AR 72701

Restricted Audience Size: 35

#10 The Applications of Raman Spectroscopy in Forensic Sciences

Tuesday, July 22, 2008

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

Raman spectroscopy has recently become more popular for the chemical analysis of several types of materials of forensic interest. The Raman technique allows for the measurement of the inelastic scattering of light due to the vibrational modes of a molecule when irradiated by an intense monochromatic source such as a laser. Thanks to important technological progress, modern Raman spectrometers have increased their sensitivity necessary to detect the weak signal called Raman scattering.

The workshop on the application of Raman spectroscopy is aimed to familiarize interested forensic scientists with this technique. The advantages and limitations of the Raman technique will be emphasized. Amongst the advantages, figures its non-destructive nature, short analysis time, and the possibility of performing microscopic *in situ* analyses.

Several distinguished guests will be present to share their experience and expertise in different area of forensic sciences. The first part of the workshop will present some theory on Raman spectroscopy and highlight the application of this technique on different types of forensic samples. A state-of-the-art concerning the use of Raman spectroscopy will be presented on drugs of abuse, questioned documents and ink analysis, explosives and trace evidence.

Practical training is also provided and will allow the participants to become familiar with the latest versions of commercially available instruments, their components, their functions, and their manipulations. Several instruments of different manufacturers will be presented. The second part of the workshop will allow the participants to do some practical work on Raman instruments. The advantages and disadvantages of the analysis for several types of materials and the problems linked to the interpretation of results will be shown and discussed.

Faculty:

Patrick Buzzini

Forensic & Investigative Science Program
West Virginia University
304 Oglebay Hall
1600 University Avenue
Morgantown, WV 26506-6121

Genevieve Massonnet

Ecole des Sciences Criminelles
University of Lausanne
Le Batochime,
Quartier Sorge, CH-1015 Dorigny-Lausanne
Switzerland

#11 Forensic Laboratory Planning and Design

Tuesday, July 22, 2008

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

This eight hour workshop was first presented in 2003 to the European Academy of Forensic Sciences in Istanbul. The first half of the workshop covers the entire project development process for a forensic laboratory from establishing the need, design programming, and the facility design process. Critical design issues are addressed, including mechanical, electrical, plumbing, security, safety, and site requirements. The second half of the workshop addresses the specific architectural and engineering design requirements for each of the major laboratory sections within the forensic laboratory. The presenter has been designing forensic facilities throughout the United States and abroad since 1983.

Faculty:

Michael G. Mount, BA
SmithGroup, Incorporated
455 North Third Street, Suite 250
Phoenix, AZ 85004

#12 Investigations of Disputed Signatures: Motor Control Perspectives

Tuesday, July 22, 2008

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

Opinions by forensic specialists regarding the authenticity of disputed signatures are underpinned by both theoretical and experiential components. Traditional theory has, in recent times, evolved to incorporate aspects of the process by which complex movements are learned and carried out in the environment. Much of the theory required by forensic handwriting examiners can be extracted from the motor control literature. This eight-hour workshop will provide participants with psycho-physiological theory directly related to the normal process of production of skilled signatures and will explore why it is, at a sensory/motor level, that skilled signatures are difficult for individuals to mimic successfully. The morning session will explore the theoretical relationship between the work of specialists on genuine, disguised, and simulated signatures and the production of these forms in both the static and dynamic domains. The afternoon session will be focused on real examples of these signatures; will provide participants with the opportunity to consider motor models of their production, in terms of features that they can observe, and will provide further insights into the interpretation of static features in the dynamic domain. Participants should gain a clear understanding of the relevance of motor control science to the forensic signature examination paradigm. They will be provided with opportunities to examine genuine, disguised, and simulated signatures and carry out blind tests to assist in their personal skill assessment with respect to relating theoretical constructs to casework problems.

Faculty:

Bryan J. Found, PhD
Forensic Expertise Profiling Laboratory
School of Human Biosciences
La Trobe University
Bundoora, Victoria, Australia
Digital & Document Evidence Branch
Applied Science Division
Victoria Police Forensic Centre
31 Forensic Drive, Macleod
Victoria 3085, Australia

Linton A. Mohammed, MFS
San Diego Sheriff's
Regional Crime Laboratory
5255 Mt. Etna Drive
San Diego, CA 92117

#13 The Use of LC/MS in the Forensic Toxicology Laboratory

Tuesday, July 22, 2008

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

Gas chromatography/mass spectrometry has long been recognized as the gold standard for drug identification in a forensic toxicology setting. Recent years, however, have seen the development of liquid chromatography/mass spectrometry (LC/MS) as a powerful new tool for both identification and quantitation of a variety of compounds. With the advent of this increasingly affordable technology, many laboratories have turned to LC/MS as an integral part of their operation.

This workshop will provide the participant with an overview of LC/MS operation, and discuss the advantages of moving from GC/MS to LC/MS/MS. It will include an overview of LC/QqQ (triple quad), LC/QTOF (time of flight), LC/TOF, LC/MS (single quad), LC/MS ion trap and DART-TOF (Direct Analysis in Real Time, Time of Flight MS) technologies. The different mass spectrometers will be discussed in light of each instrument's strengths and weaknesses for providing forensically-acceptable, highly sensitive screening and identification results. In addition, a strategy for LC/MS method development and validation will be presented. Several LC/MS applications will also be discussed, including screening biological samples for hundreds of drugs of forensic significance, as well as quantitation of several drug classes routinely encountered in the forensic toxicology laboratory. Further discussion will be provided on a software interface for LC/MS that enables users to quickly develop and implement testing methods and to train novice users in LC/MS operation.

Faculty:

Christopher Heartsill, BS
Dallas County Medical Examiner
5230 Medical Center Drive
Dallas, TX 75235

Susan R Howe, PhD
Tarrant County Medical Examiner
200 Feliks Gwozdz Place
Fort Worth, TX 76104

Robert D. Johnson, PhD
Federal Aviation Administration
Civil Aerospace Medical Institute
Oklahoma City, OK 73125

Greg Eppink, BS, MBA
Applied Biosystems
3567 River Ridge Way
Perrysburg, OH 43551

H. Chip Walls, BS
University of Miami
Department of Pathology
Forensic Toxicology Laboratory
12500 SW 152nd Street, Building B
Miami, FL 33177

#14 Building the Case For a New Lab

Tuesday, July 22, 2008

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

Who Should Attend?

The targeted audience is crime lab directors and/or user representative “champions” involved in the early stages of planning new or renovated laboratories. To ensure interactive participation, we suggest up to 25 workshop attendees.

Learning Objectives

Crime Lab Design professionals demonstrate a practical approach to help crime lab directors build the case for a new or renovated lab. By attending this workshop, they will:

1. Gain a basic understanding of current issues and trends in forensic science,
2. Learn how to assess the effectiveness of their existing labs and
3. Develop planning strategies and methodologies for building support and obtaining financial resources for a new or renovated forensic facility and improving processes.

Relevance

Many laboratories across the country are under funded, are located in inadequate facilities, don't have the latest computer and equipment, and have ever-increasing demands for their services. This workshop provides attendees with the tools and methodologies to help them quantify, justify, and build support for capital investment in their forensic facilities.

Course Content

The course content includes a combination of electronic presentations plus other collateral material, together with open discussion and group planning exercises. These illustrate issues and trends in the design of forensic facilities, assessing existing facilities and processes, determining whether to renovate or build new, planning methodologies for sizing, scheduling and costing a project

Each participant receives bound course materials that include copies of the presentation and other useful support materials such as sample needs assessment questionnaire, situational matrix, process mapping flow diagram, budget spreadsheet, milestone schedule, equipment matrix, chemical inventory, reference bibliography, and case study.

The workshop is divided into four sections approximately 45 minutes in duration with 10-minute breaks between sections. There is a fifth section (summary conclusion) lasting about 20 minutes. Questions are welcome throughout the presentation.

Prerequisites

Each participant is encouraged to bring and share specific metrics about their existing lab, operations, staffing, and funding. A short questionnaire will be provided online or on-site to gather this information before the workshop.

Presenters' Qualifications

Within the last 9 years, Crime Lab Design presenters have helped 38 clients in 32 cities across the U.S. with forensic planning and design services. Crime Lab Design is an alliance between HERA and Harley Ellis Devereaux. They have broad experience working with forensic scientists, administration, municipal, and state officials to program, plan, and design forensic facilities for ASCLD/LAB accreditation. These facilities have included high-sensitivity and mitochondrial DNA labs, in-situ/genetics labs, and toxicology labs for drugs and alcohol, together with firing ranges, vehicle inspection bays and evidence receipt and storage facilities, to name a few.

Workshop Outline

This half-day workshop has been organized to encourage individual group participation and to provide flexibility for special areas of interest that may result from open discussion. The following is a basic course area, learning format, and estimated durations.

Course Description:

This workshop is designed for forensic professionals who believe that they need a new lab but just don't know where to start. Tools and methodologies will be provided to attendees to help quantify, justify, and build support for capital investment in their forensic facilities. The course content will include issues and trends in the design of forensic facilities; assessing existing facilities and processes; determining whether to renovate or build new; and methodologies for sizing, scheduling, and costing a project. This workshop will be very participatory so attendees should come prepared to roll up their sleeves and try their hands at designing a lab.

Faculty

Gwen K. Chouinard, BA
Crime Lab Design
1620 Fifth Avenue, Suite 100
San Diego, CA 92101

Ken Mohr, BS
Crime Lab Design
14 North Newstead
St. Louis, MO 63108-2208

Laurie Sperling, MA
Crime Lab Design
14 North Newstead
St. Louis, MO 63108-2208

Lou Hartman, BSME
Crime Lab Design
26913 Northwestern Highway
Southfield, MI 48033

Jon Kokanovich, BS, MA
Crime Lab Design
3515 East Kristal Way
Phoenix, AZ 85050

Restricted Audience Size: 25

Poster Sessions — Wednesday

Clinical Forensic Medicine Posters

- 9:00 a.m. - 5:00 p.m. **141** **Using Google-VEP to Assess Loss of Visual Field Objectively**
*Xu Wang**
- 9:00 a.m. - 5:00 p.m. **153** **Mortalities Among Children and Adolescents in a Rural Part of Southern India**
Tanuj Kanchan, MBBS, DFM, MD; Ritesh G. Menezes, MBBS, MD, DNB*
- 9:00 a.m. - 5:00 p.m. **235** **Comparison Between Computed Tomography Findings on Admission and Those at Cardiopulmonary Arrest in Cases of Abdominal Trauma**
Kentaro Yamazaki, PhD; Seiji Shiotani; Noriyoshi Ohashi; Kazuo Umetsu, PhD; Hideyuki Hayakawa, PhD*
- 9:00 a.m. - 5:00 p.m. **241** **Three-Dimensional Reconstitution of Bullet Trajectory in Gunshot Wounds: A Case Report**
Katerina Puentes, MD; Francisco Taveira, MD, MSc; Antonio Madureira, MD; Agostinho Santos, MD, PhD; Teresa Magalhaes, MD, PhD*
- 9:00 a.m. - 5:00 p.m. **347** **The Brainstem Injury in Victims Dead From Being Hit by Fist or Palm: An Analysis of 23 Cases**
Yixuan Song; Chao Liu*

Crime Scene Investigation Posters

- 9:00 a.m. - 5:00 p.m. **20** **Exclusion of Syringe/Needle Blood Samples From Racehorse Sample Matching by Detection of Microsatellite Loci**
Jinwen Chen, PhD; Cornelius E. Uboh, PhD; Lawrence R. Soma, VMD*
- 9:00 a.m. - 5:00 p.m. **27** **A Half Century Retrospective Study of Homicide-Suicide in Geneva Switzerland: 1956 – 2005**
Kebede Shiferaw, MD; Sandra Burkhardt, MD; Christelle Lardi, MD; Romano La Harpe, MD*
- 9:00 a.m. - 5:00 p.m. **435** **The Study of Chemical Method of Developing Dusting Footprints**
Haiqing Shi; Jiantong Hong*; Hong Jiang**
- 9:00 a.m. - 5:00 p.m. **499** **Violent Hanging: The Method is Noticeable**
*Necmi Cekin, MD; Filiz Erdobnez, MD; Doganay Kurkcu, MD; Ahmet Hilal, MD; Mete K. Gulmen, MD**
- 9:00 a.m. - 5:00 p.m. **573** **The Research on Gender Analysis by Morphological Characteristics of Footprint**
*Chengqing Tang, MS**

Criminal Profiling Posters

- 9:00 a.m. - 5:00 p.m. **515** **Comparison and Classification of the Seized Drugs in Curkrova Region in 2007**
Dilek Battal, MSc; Mete K. Gulmen, MD; Necmi Cekin, MD; Ahmet Hilal, MD*

Poster Sessions — Wednesday

DNA Profiling and Serology Posters

- 9:00 a.m. - 5:00 p.m. **53** **DNA-Marking of "Security-Packs"**
*Filippo G. Finocchiaro**
- 9:00 a.m. - 5:00 p.m. **79** **Biological Material Under Fingernails — What Else Do We Catch Besides the Owner's DNA?**
*Kim Vos, MSc**
- 9:00 a.m. - 5:00 p.m. **135** **Elucidation of the Contributors for a Multiple-Source Splatter of Semina Stains: A Calculated Approach**
*Lay-Hong Seah, PhD**
- 9:00 a.m. - 5:00 p.m. **168** **DNA Typing From Skeletal Remains by Invitrogen Charge Switch Forensic DNA Purification Kit - Validation Study (Part II)**
Anna Barbaro; Patrizia Cormaci; Aldo Barbaro*
- 9:00 a.m. - 5:00 p.m. **171** **DNA Profiling From Prints Left on the Skin Using the Charge Switch Forensic DNA Purification Kit (Invitrogen)**
Anna Barbaro; Patrizia Cormaci; Aldo Barbaro*

Drugs of Abuse Posters

- 9:00 a.m. - 5:00 p.m. **436** **Identification of the N-Desmethylsibutramine as a New Active Ingredient in the Chinese Herbal Medicine**
Dariusz B'achut; Zbigniew Czarnocki; Agnieszka Siwińska-Ziókowska; Krystyna Wojtasiewicz; Marta Bykas-Strêkowska*
- 9:00 a.m. - 5:00 p.m. **527** **High Dosage Sibutramine Detected in Chinese Herbal Drug: A Case Report**
Nebile Dagioglu, MSc; Mete K. Gulmen, MD; Ahmet Hila, MD*

Fingerprint Detection and Identification Posters

- 9:00 a.m. - 5:00 p.m. **136** **GC-MS Method for Derivatization Analysis of Lipid Compositions in Fingerprint Residue**
Yong Feng Zhao, MS; Rui Qin Yang; Yuan Feng Wang; Ke Zhao, MS*
- 9:00 a.m. - 5:00 p.m. **188** **Development of Oily-Rich Latent Fingerprints on Adhesive Side of Black Electrical Tape Using Nano Titanium Dioxide (TiO₂) In Small Particle Reagent**
Ke Zhao, MS; Yuan Feng Wang; Rui Qin Yang; Yong Feng Zhao, MS*
- 9:00 a.m. - 5:00 p.m. **249** **Fingerprint Components Emitting Ultraviolet Fluorescence Excited With a Ultraviolet Pulsed Laser**
Norimitsu Akiba, PhD; Naoki Saitoh, BS; Kenro Kuroki, PhD; Noaki Igarashi, BS; Kenfichi Tsuchiya, PhD*
- 9:00 a.m. - 5:00 p.m. **310** **Effect of Substrate and Development Method on Visibility of Sweat Pores in Latent Fingerprints: A Preliminary Study**
Om Prakash Jasuja, PhD; Gagan Deep Singh, MSc; Garima Choudhary, MSc; Gurvinder Singh Sodhi, PhD*

Poster Sessions — Wednesday

Forensic Anthropology and Human Identification Posters

- 9:00 a.m. - 5:00 p.m. **80** **Documenting "Toothless" Saw Blade Cutmarks in Bone**
*John A. Williams, PhD**
- 9:00 a.m. - 5:00 p.m. **127** **Alcoholism Related Weight Loss in Bone**
Bridget F.B. Algee-Hewitt, MA; Rebecca J. Wilson, MA*
- 9:00 a.m. - 5:00 p.m. **132** **Thermal Analysis of Bones in Forensic Applications**
Sophil Raja, BSc; Barbara H. Stuart, PhD; Paul S. Thomas, PhD;
Christopher O'Brien, BSc*

Forensic Pathology Posters

- 9:00 a.m. - 5:00 p.m. **19** **Relationship of Body Mass Index (BMI) to Minimum Distance from Skin Surface to Myocardium: Implications for Neuromuscular Incapacitating Devices (NM ID)**
Gregory G. Bashian, MD; Gabriel A. Wagner, MD; Don W. Wallick, PhD;
Patrick J. Tchou, MD*
- 9:00 a.m. - 5:00 p.m. **57** **Analysis of Deaths Due to Allergic Reaction: A Report of 28 Cases in Maryland and Shanghai**
Yiwen Shen, MD; Ziqin Zhao, MD; Ling Li, MD; Jami Grant, PhD; Dawn Zulauf;
Ana I. Rubio, MD; Xiang Zhang, PhD; Aimin Xue, PhD; David R. Fowler, MD*
- 9:00 a.m. - 5:00 p.m. **64** **SIDS – The Cause of Death**
*Irina Burulianova, PhD**
- 9:00 a.m. - 5:00 p.m. **69** **Evaluation of Postmortem Serum and Cerebrospinal Fluid Growth Hormone Levels in Relation to the Cause of Death in Forensic Autopsy**
Takaki Ishikawa, MD, PhD; Chiemi Yoshida, MD; Ayumi Komatsu, MD;
Li Quan, MD, PhD; Tomomi Michiue, MD; Dong Zhao, MD, PhD;
Marianne Hamel, MD, PhD; Hitoshi Maeda, MD, PhD*
- 9:00 a.m. - 5:00 p.m. **71** **Death for Microembolism of Liquid Silicon**
Jorge E. Paredes; Andres D. Restrepo*
- 9:00 a.m. - 5:00 p.m. **82** **Bullet Embolization to the Right Atrium**
Jeffrey R. Springer, MD; William Newman, MD*
- 9:00 a.m. - 5:00 p.m. **121** **Are the Malignancies Developed in Chemical War Fare Victims Behaviorally and Biologically Different From the Ordinary Ones? A Prospective Postmortem Study**
*Hamid Reza Sharifzad**
- 9:00 a.m. - 5:00 p.m. **124** **Sudden Death Following a Struggle During Arrest by the Police: Four Autopsy Cases**
Takaki Ishikawa, MD, PhD; Tomomi Michiue, MD; Li Quan, MD, PhD;
Bao-Li Zhu, MD, PhD; Hitoshi Maeda, MD, PhD*
- 9:00 a.m. - 5:00 p.m. **140** **Neonatal Intrapericardial Teratoma: A Case Report**
*Gregory N. Kozlov, DO**
- 9:00 a.m. - 5:00 p.m. **144** **Traumatic Basal Subarachnoid Hemorrhage Caused by a Beer Can**
Christina Jacobsen, MD, PhD; Hans Petter Hougen, MD, PhD, DMSc, MPA*
- 9:00 a.m. - 5:00 p.m. **162** **PMI Simulating Study on Parameters of Active Ratio in the Corneal Endothelium**
Yingchun Liu, MS; Changmia Xu, Yuehua Wang; Haison Zhang*

Poster Sessions — Wednesday

- 9:00 a.m. - 5:00 p.m. **170** **Cell Stress Markers in Cases of Sudden Unexpected Death in Infancy**
Marianne C. Rohde, MD; Stinne P. Schmidt; Thomas, J.C., PhD;
Jytte Banner, PhD; Niels Gregersen, DrMedsc*

Forensic Psychiatry Posters

- 9:00 a.m. - 5:00 p.m. **474** **Sociodemographic and Criminological Assessment of Multiple Homicide Perpetrators**
M. Feyzi Sahin; Deniz Oguzhan Melez; Suheyyla Aliustaoglu; Ferruh Baklacýoglu;
Gokhan Oral*
- 9:00 a.m. - 5:00 p.m. **475** **The Investigation of Depression Scale Points of Sentenced or Prisoner Adults in Ceyhan — Turkey M Type Jail, From the Standpoint of Some Variables**
Esin Turanbayburt, MSc; Mete K. Gulmen, MD, PhD*

Questioned Documents Posters

- 9:00 a.m. - 5:00 p.m. **207** **Questioned Documents**
*Huang Jiantong**
- 9:00 a.m. - 5:00 p.m. **298** **Stable Isotope C13 Security Ink Development**
*Rui Li Chen**
- 9:00 a.m. - 5:00 p.m. **342** **Experimental Research Into Single Solvent Extraction to Judge Relative Made Time of Red Printed Text**
Jia Li; Jiantong Huang**
- 9:00 a.m. - 5:00 p.m. **366** **Determining the Sequencing of Laser Printing and Seal Stamps Using the VSC**
*Jianwei Liu, MD**

Toxicology Posters

- 9:00 a.m. - 5:00 p.m. **11** **A Research on Breath and Blood Alcohol Concentration of Korean People Drinking**
Dong-Wook Kim, PhD; Ji-Sook Min, PhD; Young-Ho Chung, PhD;
Won-Young Lee, PhD; In-Seok Kim; Catherine H. Park; Moun-Hye Youn*
- 9:00 a.m. - 5:00 p.m. **50** **Deaths From Methadone Use Among Teenagers in Maryland**
Ling Li, MD; Xiang Zhang, MD; Eleanor Thomas; David R. Fowler, MD*
- 9:00 a.m. - 5:00 p.m. **68** **Retrospective Study on Poisoning Deaths in Hubei Province, China**
Lan Zhou, BM; Ling Li, MD; Liang Liu, BM, PhD*; Guangzhao Huang, BM;
Liu Yan, MM; Yiwen Shen, MM; Xiang Zhang, MM; David R. Fowler, MD*
- 9:00 a.m. - 5:00 p.m. **76** **Effects of Opium Addiction on Some Serum Factors of Alloxan-Induced Diabetic Rats**
Hatem Abdel Moni Ahmed; Khaled Mohamed Ibrahim*

Poster Sessions — Thursday

Clinical Forensic Medicine Posters

- 9:00 a.m. - 5:00 p.m. **348** **Pathological Changes of Cranial Nerves Caused by Brainstem Injury**
*Qingsong Yao**; Ping Deng, MD; Chao Liu; He Shi; Guansan Wang; Yixuan Song
- 9:00 a.m. - 5:00 p.m. **423** **The Application of MRI in the Injury Appraisalment and Postmortem Examination**
*Huiqin Zhang**; Xudong Zhao, MS
- 9:00 a.m. - 5:00 p.m. **466** **The Determination of Intracranial Mass and Cerebrovascular Disease According to Clinical and Radiological Findings in Terms of Malpractice**
*Sinem Akat**; Deniz Oguzhan Melez, MD; Belkis Yapar, MD; Nur Birgen, MD; Erbil Gozukirmizi, MD; Murat Hanci, MD, MSc
- 9:00 a.m. - 5:00 p.m. **536** **Investigation of Elderly Abuse and Neglect From Forensic Autopsy Cases**
*Kou Takahashi, PhD**
- 9:00 a.m. - 5:00 p.m. **539** **Deaths of Epileptic Turkish Individuals Between 2000 and 2005**
*Sinem Akat, MD**; Riza Yilmaz, MD*; Sema Demircin, MD; Bahadir Kumral, MD; Suleyman Serhat Gurpinar, MD; Sinem Akat, MD*
- 9:00 a.m. - 5:00 p.m. **723** **Introducing ASCLD Consulting**
*Joseph P. Bono, MA**

DNA Profiling and Serology Posters

- 9:00 a.m. - 5:00 p.m. **204** **Detection of Apurinic/Apyrimidinic Sites From Forensic Materials**
*Jian Tie, MD, PhD**; Seisaku Uchigasaki, MD, PhD; Shigemi Oshida, MD, PhD
- 9:00 a.m. - 5:00 p.m. **222** **X-SNP Typing by SNPlex Assay**
*Li Li, MS**; Jing-Jing Chang; Hong-Liu Guo; Yuan Lin; Cheng-Tao Li
- 9:00 a.m. - 5:00 p.m. **256** **Human Stool DNA Fingerprint**
*Aree Lempan**; Sritad Kantang; Unchalee Kongsrisook
- 9:00 a.m. - 5:00 p.m. **273** **Population Genetic Study of Twelve Short Tandem Repeat Loci in Western Romanian Population**
*Fotios G. Chatzinikolaou, MD, PhD**; Marian Catalin, PhD; Andrei Angel, MD, PhD; Alexandra Enache, MD, PhD; Milan Dressler, MD, PhD
- 9:00 a.m. - 5:00 p.m. **345** **False Homozygosity in Paternity Studies: Homoplasmy Detection of the SE33 Microsatellite Locus**
*Lilia Laverde, MSc**; Manuel Paredes; Helena Groot, MSc
- 9:00 a.m. - 5:00 p.m. **359** **An Allelic Microvariant of D7S820 STR Locus in a Romanian Population Sample**
*Fotios G. Chatzinikolaou, MD, PhD, JD**; Alexandra Enache, MD, PhD, JD; Marian Catalin, PhD; Andrei Angel, MD, PhD; Milan Dressler, MD, PhD, JD

Fingerprint Detection and Identification Posters

- 9:00 a.m. - 5:00 p.m. **311** **Development of Latent Fingerprints on Photographic Film**
*Om Prakash Jasuja, PhD**; Gagan Deep Singh, MSc; Gurvinder Singh Sodhi, PhD
- 9:00 a.m. - 5:00 p.m. **313** **Small Particle Reagent: Development of Fluorescent Variants**
*Gagan Deep Singh, MSc**; Om Prakash Jasuja, PhD; Gurvinder Singh Sodhi, PhD

Poster Sessions — Thursday

- 9:00 a.m. - 5:00 p.m. **314** **A Dermatoglyphic Study in Cases of Polydactyly and Syndactyly**
Gagan Deep Singh, MSc; Om Prakash Jasuja, PhD; Munish Kumar, MSc*
- 9:00 a.m. - 5:00 p.m. **338** **The Comparative Research on Development of Blood Latent Fingerprints on Adhesive Tape**
Rui Li Chen; Qian Wen Wen*

Forensic Anthropology and Human Identification Posters

- 9:00 a.m. - 5:00 p.m. **143** **Sexual Dimorphism of Index to Ring Finger Ratio in South Indian Adolescents**
Tanuj Kanchan, MBBS, DFM, MD; G.P. Kumar, MBBS, MD, DFM; Ritesh G. Menezes, MBBS, MD, DNB*
- 9:00 a.m. - 5:00 p.m. **418** **Study on Identification by Using Elbow Joint Computer Radiographic Films of Chinese Han Adults**
Huiqin Zhang; Xinhua Xue*
- 9:00 a.m. - 5:00 p.m. **427** **Study on Identification Using Skull's Computer Radiographic Films of Chinese Han Adults**
Huiqin Zhang; Guohua Miao; Min Chen; Lei Yan*

Forensic Pathology Posters

- 9:00 a.m. - 5:00 p.m. **213** **Sudden Unexpected Infant Deaths Implications for Future Prevention**
Yang Zhang; Ping Yan, MD; Eleanor Thomas; Ling Li, MD; David R. Fowler, MD; Ronald H. Zielke, PhD*
- 9:00 a.m. - 5:00 p.m. **206** **Estimation of Postmortem Interval From Ear Temperature Taken by Infrared Ray Technique**
Huiqin Zhang; Kaizhan Sun; Lei Yan*
- 9:00 a.m. - 5:00 p.m. **194** **Sudden Unexpected Death Due to Undiagnosed Leukemia: A Forensic Autopsy Study and Review of Literatures**
Zhiqiang Qin; Ling Li*
- 9:00 a.m. - 5:00 p.m. **251** **Study on the Relation Between the Changes of tPA & MMP-9 Expression and Traumatic Subarachnoid Haemorrhage in Brain of Acute and Chronic Alcoholism Rats**
Bo Hu, BM; Guang-Tao Xu, MM; Xiao-Jun Yu, PhD; Gui-Shan Gao, MM; Guo-Hui Xu, MM*
- 9:00 a.m. - 5:00 p.m. **261** **Death Following Blunt Trauma to the Neck**
Birgitte Kringsholm; Christina Jacobsen*
- 9:00 a.m. - 5:00 p.m. **270** **Injuries and Deaths Caused by Mole Guns**
Serafettin Demirci, MD; Kamil Hakan Dogan, MD; Mete Korkut Gulmen, MD; Zerrin Erkol, MD*
- 9:00 a.m. - 5:00 p.m. **271** **Dead Bodies Found in the Wells**
Kamil Hakan Dogan, MD; Serafettin Demirci, MD; Zerrin Erkol, MD; Mete Korkut Gulmen, MD; Idris Deniz, MD*
- 9:00 a.m. - 5:00 p.m. **335** **Self-Ingested Pesticides in Crete Island**
Anastasia E. Kastanaki, MSc; Christos F. Kraniotis; Fotis G. Chatzinikolaou, PhD, MD; Elena F. Kranioti, MD; Anna N. Mavroforou, PhD; Antonis Papadomanolakis, MD, PhD; Pavlos N. Theodorakis, MD, PhD; Manolis M. Michalodimitrakis, MD, JD*

Poster Sessions — Thursday

- 9:00 a.m. - 5:00 p.m. **336** **Forensic Deaths in Soldier Population**
Harun Tugcu; Caglar Ozdemir; Mehmet Toygar, MD; Birol Demirel; Yildiray Zeyfeoglu; Mukerrem Safali*
- 9:00 a.m. - 5:00 p.m. **365** **Some Aspects Related to Suicide in Our Area**
Alexandra Enache, MD, PhD, JD; Fotios G. Chatzinikolaou, MD, PhD, JD; Elena Kranioti, MD*
- 9:00 a.m. - 5:00 p.m. **416** **A Case Report of Death Due to Hanging**
Berna Senel Eraslan; Deniz Oguzhan Melez; Ahmet Selcuk Gurler; Bulent Sam*
- 9:00 a.m. - 5:00 p.m. **417** **Aspiration Deaths Among Adults in Istanbul**
Caglar Ozdemir; Ibrahim Uzun, MD; Hakan Kar; Hasim Asil, MD; Mete K. Gulmen*

Forensic Science Education Posters

- 9:00 a.m. - 5:00 p.m. **713** **ASCLD**
*Joseph P. Bono, MA**

Questioned Documents Posters

- 9:00 a.m. - 5:00 p.m. **384** **Reveal of Writing Strokes From in Between Rewritten Over Obliterated Writings for Clear Reading and Comparison Purposes**
*Mohamed R. Helal Radwan**
- 9:00 a.m. - 5:00 p.m. **395** **The Study of the Relative Age of Seal Stamps by TLC**
*Shuang Hu**
- 9:00 a.m. - 5:00 p.m. **438** **A Suicidal Note Written Onto the Left Forearm and Palm - Psychological Autopsy and Differentiation Between Suicide and Homicide**
Riza Yilmaz; Veli Ozdemir; Erdogan Kara; Ali Ulvi Calik; Zerrin Erkol; Deniz Oguzhan Melez*
- 9:00 a.m. - 5:00 p.m. **503** **The Application of IR Spectrophotometry and Micro-ATR Objective for Toner Examination**
Sawomir Szczepańczyk, Urszula Konarowska, MSc*

Toxicology Posters

- 9:00 a.m. - 5:00 p.m. **92** **Extraction and Identification of Aldicarb (Temik) From Postmortem Tissues Samples**
Ahmed Sayed Ahmed, MS; Kahled Mohamed Ibrahim*; Madiha M. Zakhary*
- 9:00 a.m. - 5:00 p.m. **173** **Stability of Incorporated Drug Analytes Within Hair in a Soft Tissue Decomposition Environment**
Galiena W. Tse, BSc; Shari L. Forbes, BSc, PhD*
- 9:00 a.m. - 5:00 p.m. **180** **Suicide by the Inhalation of Automobile Exhaust Gas – Is the Cause of Death Carbon Monoxide Intoxication?**
Migiwa Asano, MD, PhD; Hideyuki Nushida, MD, PhD; Kanako Nakagawa, PhD; Azumi Kuse; Yasushi Nagasaki, MD, PhD; Yasuhiro Ueno, MD, PhD*
- 9:00 a.m. - 5:00 p.m. **189** **Toxicoepidemiology of Fatal Poisoning in Southern India**
Tanuj Kanchan, MBBS, DFM, MD; Ritesh G. Menezes, MBBS, MD, DNB; T.S. Mohan Kumar, MBBS, MD; Shankar M. Bakkannavar, MBBS*

Poster Sessions — Thursday

Traffic Medicine Posters

- | | | |
|-----------------------|------------|--|
| 9:00 a.m. - 5:00 p.m. | 300 | Epidemiological Features of the Disabled in Road Traffic Accident of Shanghai
<i>Li-Hua Fan*</i> ; <i>Wen-Tao Xia</i> ; <i>Jia-Jian Shen</i> |
| 9:00 a.m. - 5:00 p.m. | 187 | Using Information Processing and Accident Reconstruction in Traffic Accident Identification
<i>Yijiu Chen, MS*</i> ; <i>Ningguo Liu</i> ; <i>Donghua Zou</i> |
| 9:00 a.m. - 5:00 p.m. | 305 | Some Medico-Legal Aspects of Fatal Traffic Accidents in Albania
<i>Besim Ymaj</i> ; <i>Bardhyl Cipi, MD*</i> |
| 9:00 a.m. - 5:00 p.m. | 255 | Estimation of Bicyclist's Traffic Behavior by Ride and Impact Injuries
<i>Ningguo Liu, MM*</i> |

Other Posters

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|-----------------------|------------|---|
| 9:00 a.m. - 5:00 p.m. | 440 | Sabre 400 - Determination of the Detection Limits for Common Explosives
<i>B'achut Dariusz, MD*</i> ; <i>Zbigniew Zelek</i> ; <i>S'womir Szczepańczyk</i> |
| 9:00 a.m. - 5:00 p.m. | 523 | Head Volume Rendering Through Cone Beam CT Imaging As a New Method in Forensics
<i>Ahmad A. Abdelkarim, DDS*</i> |
| 9:00 a.m. - 5:00 p.m. | 581 | Research on Recognition of Dynamic Image in Surveillance Video
<i>Xuejing Dai*</i> |

Poster Sessions — Friday

Clinical Forensic Medicine Posters

- 9:00 a.m. - 5:00 p.m. **543** **Determined Anesthesia Malpractice in Evaluated Cases in Forensic Medicine Institution and Their Preventability**
*Nursen Turan**; *Aysegul Ertan, MD*; *Nesime Yayci*; *Huseyin Oz*
- 9:00 a.m. - 5:00 p.m. **546** **Childhood Deaths Due to Suicide**
*Isil Pakis, MD, PhD**; *Nesime Yayci, MD*; *Mustafa Karapirli, MD*;
Nicel Yildiz, MD; *Elif Gunce, PhD*; *Oguz Polat, MD*
- 9:00 a.m. - 5:00 p.m. **605** **Court Cases of Malpractice About Anesthesia Application Outside of Operating Room, 1996-2005**
Aysegul Ertan; *Huseyin Oz*; *Nesime Yayci*; *Nursen Turan**
- 9:00 a.m. - 5:00 p.m. **613** **The Evaluation of Ear, Nose, Throat Surgery Cases With Aim of Malpractice in Turkey Between 2003-2006**
Fatih Oghan; *Nursen Turan**; *Aysegul Ertan*; *Ali Guvey*

Criminalistics Posters

- 9:00 a.m. - 5:00 p.m. **1** **Unraveling the Pet Food Mystery: An Overview of Analyses of Adulterated Protein Concentrate and Pet Food**
*Angela S. Mohrhaus, BS**; *Jonathan J. Litzau, BS*; *Rick A. Flurer, PhD*;
Kevin J. Mulligan, PhD; *John B. Crowe, BS*; *Mark R. Witkowski, PhD*;
David S. Jackson, BS; *Timothy Y. Yi, BS*; *Laura A. Ciolino, PhD*
- 9:00 a.m. - 5:00 p.m. **157** **Analysis and Discrimination of Semi-Permanent Hair Dyes by Microspectrophotometry UV-Visible, Raman Spectroscopy and Thin Layer Chromatography**
*Genevieve Massonnet**; *Audrey Lefeuvre, MS*
- 9:00 a.m. - 5:00 p.m. **431** **The Study of Analysis Lipsticks by FT-IR**
*Hong Jiang**; *Hongbo Wang*; *Haiqing Shi**
- 9:00 a.m. - 5:00 p.m. **498** **An Evaluation of UV-Microspectrophotometry for the Comparison of Automotive Clear Coats**
*Vincent J. Desiderio, MS**; *Ada Li*

DNA Profiling and Serology Posters

- 9:00 a.m. - 5:00 p.m. **361** **A 47-Plex SNPs Typing Method Based on Single-Base Extension and Capillary Electrophoresis Technology**
*Changhui Liu**; *Liwei Chen*; *Chao Liu**
- 9:00 a.m. - 5:00 p.m. **491** **16 Y Chromosomal STR Haplotype Frequencies in Eastern Mediterranean Region of Turkey**
*Ayse Seryn, PhD**; *Husniye Canan, PhD*; *Behnan Alper*; *Mete K. Gulmen*
- 9:00 a.m. - 5:00 p.m. **521** **Evaluation of DNA Extraction Methods for Highly Degraded Skeletal Remains**
*Meredith A. Turnbough, MS**; *Arthur J. Eisenberg, PhD*; *Harrell Gill-King, PhD*;
Robert C. Benjamin, PhD
- 9:00 a.m. - 5:00 p.m. **566** **Development and Application of a 2-D Microchip-Based Process for Volume Reduction and Purification of Total Nucleic Acids**
*Carmen R. Reedy, BS**; *Kristin A. Hagan, BS**; *Briony Strachan*;
Whitney L. Meier; *Jerome P. Ferrance, PhD*; *James P. Landers, PhD*
- 9:00 a.m. - 5:00 p.m. **254** **STR-Typing of Vitreous Human DNA for Forensic Cases**
*Krisda Riproumsup**; *Kamonwan Kraitongsook*; *Channatee Rodsawang*

Poster Sessions — Friday

Engineering Sciences Posters

- 9:00 a.m. - 5:00 p.m. **41** **Deformation of Electrical Conductors Caused by Short-Circuits**
*Shiro Miyoshi**

Fingerprint Detection and Identification Posters

- 9:00 a.m. - 5:00 p.m. **570** **The Effect on the Fingerprint Developing Results by Different Solvents of DFO**
Yaping Luo, MS; Jian Li, MS*
- 9:00 a.m. - 5:00 p.m. **571** **Latent Fingerprint Development by Lanthanide Luminescence**
*Xuejing Dai**
- 9:00 a.m. - 5:00 p.m. **580** **Research on Photography of Latent Fingerprint by Inherent Fluorescence at Low Temperature**
*Xuejing Dai**
- 9:00 a.m. - 5:00 p.m. **582** **Research on Tape Stripping and Optical Development of Fingerprint on Sticky Side of Tape**
*Xuejing Dai**

Forensic Anthropology and Human Identification Posters

- 9:00 a.m. - 5:00 p.m. **542** **Stature Estimation From the Length of Sternum in South Indian Males: A Preliminary Study**
Ritesh G. Menezes, MBBS, MD, DNB; Tanuj Kanchan, MBBS, DFM, MD; G. Pradeep Kumar, MBBS, MD, DFM; Shahin A. Hunnargi, MBBS, MD*
- 9:00 a.m. - 5:00 p.m. **551** **Human? Animal? A Case of Mixed and Incomplete Skeletal Remains Solved: Successful Identification**
Dorota Lorkiewicz-Muszynska; Marzena Labecka; Janusz Kolowski; Czeslaw Zaba; Pawel Swiderski*
- 9:00 a.m. - 5:00 p.m. **572** **Availability of Comparison Materials in Skull-Based Identification Procedure: Analysis of Cases of Examined Human Skulls at Department of Forensic Medicine University of Medical Sciences in Poznan in the Period Between 1996 and 2005**
*Dorota Lorkiewicz-Muszynska**

Forensic Biology Posters

- 9:00 a.m. - 5:00 p.m. **284** **Application and Evaluation of Sinofiler Kit in Forensic Testing**
Lin Yuan, BS; Guo Hong, MS; Zhao Zhen Ming; Li Li, MS*

Forensic Odontology Posters

- 9:00 a.m. - 5:00 p.m. **104** **Study on the Indexes of Forensic Identification by the Digital Orthopantomogram of the Normal Teeth**
Gao Dong, MS; Deng Zhen Hua, MS*
- 9:00 a.m. - 5:00 p.m. **302** **Accuracy of Age Estimation From Orthopantomograph Using Demirjian's Method**
Xiaopeng Li; Jiang Tao; Ruijue Liu, MS*
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Poster Sessions — Friday

Forensic Pathology Posters

- 9:00 a.m. - 5:00 p.m. **424** **Radiological Imaging of Arteries and Veins at the Autopsy**
*Berna Senel Eraslan**; *Gursel Cetin*; *Naci Kocer*
- 9:00 a.m. - 5:00 p.m. **444** **Thymic Hyperplasia: A Rare Forensic Autopsy Case**
*Demet Meral, MD**; *Mete K. Gulmen, MD, PhD*
- 9:00 a.m. - 5:00 p.m. **448** **Forensic Thanatology and Analysis of Death Cause**
*Xiao-Jun Yu, PhD**; *Hai-Peng Wang, MD*; *Wei-Cong Wu, BM*
- 9:00 a.m. - 5:00 p.m. **452** **The Comparison of the Signs of Classical Autopsy and Virtopsy in a Case Brought Due to General Body Trauma**
*Berna Senel Eraslan**; *Gursel Cetin*; *Naci Kocer*
- 9:00 a.m. - 5:00 p.m. **455** **Cardiac Tamponade: Hemopericardium-Related Fatalities in Istanbul, Turkey**
Yalcin Buyuk, MD; *A. Selcuk Gurler, MD*; *D. Oguzhan Melez, MD**; *Yavuz Kabakus, MD*; *A. Sadi Cagdir, MD*
- 9:00 a.m. - 5:00 p.m. **472** **Sudden Death Due to Pilocytopoid Astrocytoma**
Nursel Turkmen; *Bulent Eren*; *Nil Comunoglu*; *Berna Senel Eraslan**
- 9:00 a.m. - 5:00 p.m. **485** **Ectopic Origin of Coronary Artery From the Aortic Wall**
*Berna Senel Eraslan**; *Nursel Turkmen*; *Bulent Eren*
- 9:00 a.m. - 5:00 p.m. **488** **Intracranial Dermoid Cyst**
Demet Meral; *Mete K. Gulmen**; *Arslan M. Mustafa*; *Necmi Cekin*; *Ahmet Hilal*
- 9:00 a.m. - 5:00 p.m. **493** **Conventional Histopathological Evaluation for Traumatic Fat Embolism**
*Nadir Arican**; *Nabi Kantarci, MD*; *Arzu Turan, MD*; *Oguzhan Ekizoglu, MD*; *Sebnem Korur Fincanci*
- 9:00 a.m. - 5:00 p.m. **510** **Accidental Death Due to Thinner Ingestion**
*Mete K. Gulmen**; *Demet Meral*; *Necmi Cekin*; *Ahmet Hilal*; *Ali Turhan*
- 9:00 a.m. - 5:00 p.m. **514** **Fatal Cranial Shot by Blank Cartridge Gun: Two Suicide Cases**
Yalcın Buyuk, MD; *Sadi Cagdir, MD*; *Abdullah Avsar, MD*; *Deniz Ođuzhan Melez, MD**; *Muhammed Feyzi Sahin, MD*
- 9:00 a.m. - 5:00 p.m. **547** **Immunohistochemical Study for Postmortem Diagnosis of Early Myocardial Infarction**
Safa Celik, MD; *Isil Pakis, MD, PhD**; *Coskun Yorulmaz*; *Sermet Koc*
- 9:00 a.m. - 5:00 p.m. **640** **Heart Attack After Car Accident**
Eurizanda M. Lopes, MD; *Jorge Costa Santos, PhD*; *Rita M. Melo, MD**

Questioned Documents Posters

- 9:00 a.m. - 5:00 p.m. **508** **EURO Banknote - Genuine or False?**
*Urszula Konarowska, MSc**; *Sławomir Szczepańczyk, MSc*
- 9:00 a.m. - 5:00 p.m. **602** **The Identification of Chinese Characters Handwriting Written by the People Whose Mother Tongue is Not Chinese**
*Yun Zhang**
- 9:00 a.m. - 5:00 p.m. **612** **Change of Paper Infrared Spectra at the Beginning of the XXI Century**
*Andrzej M. Witowski, PhD**; *Piotr A. Girdwoyń, PhD*; *Tadeusz J. Tomaszewki, PhD*
- 9:00 a.m. - 5:00 p.m. **621** **The Experimental Research of Charred Documents Restoration**
*Jia Li, MS**; *Jiantong Huang, BS*
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Poster Sessions — Friday

Sexual Assault Examination Posters

- 9:00 a.m. - 5:00 p.m. **107** **Data Mining: A Four-Year Review of Sexual Assault Cases in New Zealand**
*Michelle Donaldson, BTech, MSc**; *Rian Morgan-Smith, BAppSci*; *Lou M. Gallagher, PhD*
- 9:00 a.m. - 5:00 p.m. **363** **Venereal Contamination in Minor's Sexual Attempts**
Alexandra Enache, MD, PhD, JD; *Fotios G. Chatzinikolaou, MD, PhD, JD**;
Samuel N. Ndungu, MD, PhD; *Elena Kranioti, MD*
- 9:00 a.m. - 5:00 p.m. **576** **Positive Prostate-Specific Antigen (PSA) and Acid Phosphatase (AP) Reactions in Rectal Samples From Deceased Males**
*Helmuth W. Sippel**; *Philippe Lunetta, PhD*

Toxicology Posters

- 9:00 a.m. - 5:00 p.m. **392** **Comparative Regression Analysis of Ethanol in a Korean Male Population**
*Yoo Seong Ho, MD**
- 9:00 a.m. - 5:00 p.m. **411** **Determination of Ethyl Glucuronide in Human Blood by LC⁺MS/MS**
*Shen BaoHua, BS**
- 9:00 a.m. - 5:00 p.m. **482** **Detection of Sertraline in Fixed Tissues and Formalin Solutions: An Animal Study**
*Ahmet Hilal**; *Nebile Daglioglu, MSc*; *Dilek Battal, MSc*; *Mete K. Gulmen*;
Necmý Cekýn; *Behnan Alper*

Breakfast Seminars

Pre-Registration Required - \$32

Tuesday

#1 Bad Science: The Floyd Landis Case

July 22, 2008

7:00 a.m. - 8:30 a.m.

Bruce A. Goldberger, PhD

University of Florida
Department of Pathology
College of Medicine
Gainesville, FL

Robert D. Blackledge, MS

Retired Forensic Chemist
El Cajon, CA

Floyd Landis, a professional bicycle racer from Murrieta, California, won the 2006 Tour de France. However, not many days after the race's conclusion, the Laboratoire National de Dépistage du Dopage (LNDD) "announced" (actually the information was leaked to the press) that a urine sample obtained from Floyd after stage 17 had been found to be positive for a form of synthetic testosterone. If this finding were to be upheld, Landis would be stripped of his title and also banned from participation in the sport. Landis denied any sports doping and his strategy in fighting these charges has been to try to generate public support and to make all of the documentation of the LNDD tests available to the public. GC/MS is used by LNDD for preliminary sample screening, and carbon stable isotope ratio mass spectrometry is used for final confirmation. From the standpoint of a forensic analytical chemist with experience in forensic laboratory accreditation standards, this presentation will examine the analytical data and correspondence from the Landis case in terms of chain of custody requirements, World Anti-Doping Association (WADA) guidelines and LNDD SOP, and reasonable standards of good laboratory practice.

Breakfast Seminars

Pre-Registration Required - \$32

Wednesday

#2 Forensically Approved STRs Reveal Genetic Diversity and Differentiation in the Northwest China Populations

July 23, 2008

7:00 a.m. - 8:30 a.m.

Gui Hong-Sheng, MSFS

The Key Laboratory of National Ministry of Health for Forensic Sciences
College of Medicine
Xi'an Jiaotong University
Shaanxi, China

Northwest China is a region where many different independent populations have lived for more than two hundred years. Nevertheless, it's highly worthy to investigate the genetic information of these populations with molecular genetics approaches in order to preserve the genetic resource and polymorphism within this region. To characterize the genetic differentiation and evolution of 16 different populations and 12 independent minorities, nine autosomal STRs, which are widely applied in forensic science, were selected; then several statistical methods, such as principal component analysis, phylogenetic trees, R matrix analysis, and Mantel tests were processed in parallel with allele and genotype frequency data. The results of principal component analysis showed that five minority populations living in Xinjiang were clearly separated from other populations. Topologically, the branch of phylogenetic trees was in coordinate with linguistic affiliation. Regression plot of R matrix model suggested most populations had the similar patterns of gene flow at an average level, with the exception of Hui in Qinghai, which received more gene flow from outside. Unexpectedly, results of Mantel test showed that the correlation between genetic distance and linguistic distance ($r=0.5040$, $p=0.0054$) was more dominant than genetic distance and geographic distance ($r=0.0022$, $p=0.4950$), which represents that linguistic difference contributed more to genetic differentiation than geographical isolation.

Breakfast Seminars

Pre-Registration Required - \$32

Thursday

#3 New Inspection of Added Printed Forge Documents

July 24, 2008

7:00 a.m. - 8:30 a.m.

Yue Wang, MS

Southwest University of Political Science and Law
Chongqing, China

This paper presents a supplementary study of additional printed forged documents and introduces a new means of inspection to replace the old examination method. The workshop will demonstrate the common characteristics errors caused by a puncher's mechanism. The corroborant conclusion is that common characteristics can imprint impersonally on the added printed document. Lastly a new inspection method based on software from Adobe® Photoshop® will be demonstrated and prove the new inspection methods are more convenient, accurate, and efficient.

Breakfast Seminars

Pre-Registration Required - \$32

Friday

#4 Medicine, Murder, and Mayhem in Ancient Greece

July 25, 2008

7:00 a.m. - 8:30 a.m.

Richard C. Froede, MD
Tucson, AZ

Richard D. Walter, MA
Montrose, PA

During the time of Hippocrates, 460-380 BCE, the Mediterranean area sounds like an ideal Place to live. Comparing that time to the present is like "Deja Vu all over again" (Y. Berra). The presenters will discuss certain aspects of history, medicine, and crime to show that things never change but will repeat endlessly throughout the history of mankind. They will discuss that today's problems are similar to those that existed centuries ago modified only by today's technology and principles.

Special Sessions

Thursday, July 24, 2009

1:00pm – 5:00pm

#2 Cyberspace: Civil & Criminal Collaboration & Enforcement

The increased dependence on the Internet for daily activities has steered wrongdoers online to engage in their illegal conduct. Such conduct includes not only traditional illegal activities, but increasingly new forms of crime and fraud, through unsolicited e-mail, phishing, and spyware. The lack of jurisdictional boundaries and the ease in which one can conceal oneself on the Internet has created new difficulties for law enforcement in their pursuit of these wrongdoers. As a result, industry and law enforcement from throughout the world have come together to jointly combat this growing phenomena.

The purpose of this seminar is to inform the audience of the ongoing collaborative efforts, identify the specific tools and resources available to law enforcement, and suggest how law enforcement can best use those resources. Representatives from eBay and AOL will share their available assistance in forensic investigations in both civil and criminal enforcement, and law enforcement official will provide details of success and pitfalls in enforcement efforts.

1:00 - 2:15 pm **Industry Cooperation and Collaboration in Criminal Enforcement**
Don P. Colcolough, Director, Investigations & Global Security, AOL LLC

2:15 - 2:30 pm BREAK

2:30 - 3:45 pm **Industry Initiatives and Collaboration in Civil Enforcement**
Jack Christin, Jr., Senior Regulatory Counsel, eBay Inc.

3:45 - 4:00 pm BREAK

4:00 - 5:00 pm **Enforcement Perspectives & Pitfalls**
C. Brad Schuelke, Chief, Internet Enforcement Unit
Office of the Texas Attorney General

Friday, July 25, 2008

1:30pm – 3:25pm

#1 ASCLD Panel Discussion: International Issues in Forensic Science Laboratory Accreditation

Forensic science laboratory accreditation is an essential tool in building the highest possible quality system in an environment where errors can have severe repercussions on the lives and liberty of individuals. In the past decade, technological advances in areas such as DNA analysis have assisted in uncovering past miscarriages of justice, many of which have implications for forensic science laboratories. This has resulted in a re-examination of how these laboratories operate and in a renewed commitment to quality. Forensic science has caught the attention of the media, the public, and advocates for the wrongfully convicted. Now, more than ever, there are vocal demands on laboratory managers to ensure quality standards.

An international panel of experts and laboratory directors will discuss the state of accreditation and associated issues from the perspective of their geographic areas. The panel will include members from South Africa, China, and the United States and will include a presentation of The General Situation of Accreditation for Forensic Science Laboratories in China submitted as an abstract to this conference.