



28th Annual

Forensic Science Seminar

October 6-7, 2011

Presented by

Hennepin County Medical Examiner's Office
Minnesota Coroners' and Medical Examiners' Association

Jointly sponsored by

Minnesota Medical Association
Hennepin County Medical Examiner's Office
Minnesota Coroners' and Medical Examiners' Association

Visit our website!

We invite you to visit the MC&MEA website for the most up-to-date information on the *28th Annual Forensic Science Seminar*.

From this site you can:

- **Download** seminar handouts (when available) and additional seminar registration forms.
- **Get** driving directions to the seminar.
- **Find** useful links and forms.
- **Learn more** about the Minnesota Coroners' and Medical Examiners' Association.

<http://home.earthlink.net/~mc-mea>



Acknowledgments

Appreciation is expressed to LifeSource, Minnesota Lions Eye Bank, University of MN Anatomy Bequest Program, American Donor Services, and American Tissue Services Foundation for providing refreshments at morning and afternoon breaks.

Target audience

Physicians

Medical personnel

Attorneys

Law enforcement

Death investigators

Morticians/funeral directors

Continuing Education Credit

- **Legal (CLE)**
- **Peace Officers Standards and Training (POST)**
- **Medical Examiner/Coroner Investigators (ABMDI)**
- **Medical (CME[‡], Nursing CEU[°])**
- **Mortuary Science CEUs (MDH-MSS)**

Application has been filed for CLE, POST, ABMDI and AAFP credits with the proper accrediting organizations. Determination of credit is pending.

[‡]This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the Minnesota Medical Association, the Hennepin County Medical Examiner's Office and the Minnesota Coroners' and Medical Examiners' Association. The Minnesota Medical Association (MMA) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Minnesota Medical Association (MMA) designates this live activity for a maximum of 16.75 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

[°]This activity is designed to meet the Minnesota Board of Nursing's continuing education requirements. Nurses are responsible for determining whether this activity meets the requirements for acceptable continuing education credit.



Program — Day One

Thursday, October 6, 2011

7:15 a.m. REGISTRATION (*complimentary refreshments*)

7:45-8 Introduction
Mary Ann Sens, M.D., Ph.D.

8-8:15 Sudden death in a schizophrenic woman
Andrew Baker, M.D.

Objectives: Recognize the role of a complete autopsy, including microscopy, in the investigation of deaths of schizophrenic patients; cite the diseases that commonly present as sudden death in schizophrenia; describe the risks and complications of the various treatments for schizophrenia, and how they would be manifest at autopsy

8:15-9 Asphyxial deaths in adults
Sarah Meyers, M.D.

Objectives: Differentiate between the three major categories of asphyxial deaths: suffocation, strangulation and chemical asphyxia; describe the special scene and autopsy findings associated with mechanical asphyxia; identify the major scene and autopsy findings to aid in the differentiation of hanging from ligature strangulation

9-9:45 The leg bone is connected to the hip bone...
Natalie Buckman, B.A.; Michael Burakowski, B.S.; Richard Haliburton, B.S.; Greg Kinblom, M.A.

Objectives: Describe the basic organ, tissue and eye donation process; describe how to actively collaborate with the donation agency to facilitate donation with autopsy; identify the basic knowledge to make a donor referral

9:45-10 BREAK (*refreshments served*)

10-11 The Craigslist murder: State v. Anderson
Kristine Deters, M.S.; Laura Kvasnicka, B.S.; Lindsey Thomas, M.D.

Objectives: Recognize the importance of collaborative investigations between all agencies in complex medicolegal death investigations; recognize the importance of crime scene documentation

- 11-12** **Home funerals**
Heather Halen, M.A.
Objective: Understand the MN laws regarding home funerals; understand how to work effectively with families desiring home funerals
- 12-1** **LUNCH (included in registration fee)**

Lunch session – Rural coroner practice: A unique opportunity to serve and provide a credible explanation
Michael Busian, M.D.
Objectives: Identify the requirements of MN Statute 390; define expectations of the multiple entities involved in death investigation
- 1-2** **The staged scene**
Bruce Hatton, A.A.S.; A. Quinn Strobl, M.D.; Paul Young, J.D.
Objectives: Recognize the importance of a complete autopsy in motor vehicle deaths; recognize the significance of the initial body examination at the scene; ensure injuries are consistent with apparent mechanism of injury
- 2-2:15** **Unexpected postpartum death of a 25-year-old**
Marie Barbesier, M.D.; Lindsey Thomas, M.D.
Objectives: Identify causes of sudden unexpected postpartum deaths; describe a unique previously unreported complication
- 2:15-3:00** **Overview of BCA forensic services**
David Peterson, B.S., CLPE
Objectives: Identify the various forensic disciplines at the BCA and understand their capabilities and limitations; identify the response criteria for the BCA Crime Scene Team and present an overview of team's on-scene activities and products
- 3:00-3:15** **Single use only: Devices created for suicides**
Emily Duncanson, M.D.
Objectives: Discuss three cases where specialized devices were created and used for suicide; recognize how unusual devices can complicate investigations
- 3:15-3:30** **BREAK (refreshments served)**
- 3:30-4:15** **A killer in the making**
Paul Gherardi, B.S.; Thomas Uncini, M.D.
Objectives: Describe how to process a homicide due to stabbing; identify piquerism
- 4:15-4:30** **Sudden death from necrotizing esophagitis**
Owen Middleton, M.D.
Objectives: Identify the features of acute necrotizing esophagitis; cite a differential diagnosis list for upper gastrointestinal hemorrhage

4:30 CONCLUSION OF DAY ONE

4:45-5:30 MC&MEA annual meeting

MC&MEA members may remain in the main room for the annual business meeting.

5:30-6:30 DINNER (*on your own*)

6:30-8:30 p.m. Practical forensic photography workshop

Bentley Jackson, M.A.

Objectives: Recognize the strengths and limitations of the available camera equipment; demonstrate the ability to create accurate photographs for use in court proceedings; apply proper techniques of shutter and aperture control to increase the clarity of photographs; utilize camera stabilization techniques and lighting alternatives to improve photographs in low light situations; identify options for improving the clarity of close-up photographs



Program — Day Two Friday, October 7, 2011

7:45 a.m. REGISTRATION (*complimentary refreshments*)

Calvin Bandt: 1933-2003

Dr. Calvin Bandt was an extraordinary physician, forensic pathologist and teacher. He practiced forensic medicine in the early days with Dr. John Coe and Dr. Kenny Osterberg. His passion was knowledge, a skill he applied to medicine, and in particular, pathology. He developed the Hennepin County Medical Center Clinical Labs and created the Hennepin County Medical Center Toxicology Lab. Along with Dr. Coe, he studied postmortem vitreous chemistry. His lifelong quest for knowledge, keen intellect, and passion for teaching illuminated the minds and shaped the lives of many. He is still sorely missed. This lecture is dedicated to his memory and his legacy.

8-8:45 Cal Bandt lecture: Designer drugs: Decadence gone wrong

Kirk Hughes, RN, EMT-B, CSPI

Objectives: Discuss the origin of designer drugs and identify examples of designer drugs; describe the effects and complications of designer drug use; discuss mortality and morbidity epidemiology of designer drugs in the U.S.

- 8:45-9** **Diver down!**
Lorren Jackson, M.D.
Objectives: Explain the basic principles of diving physiology that influence dive-related mishaps; describe the classic clinical and post-mortem anatomic findings of diving fatalities; review protocols for investigation of diving deaths
- 9-9:45** **Alkaline hydrolysis – a new form of cremation**
Terry Regnier, B.S.
Objectives: Describe, compare and contrast alkaline hydrolysis to traditional cremation; recognize an increased interest in alternative forms of final disposition
- 9:45-10** **BREAK (*refreshments served*)**
- 10-10:45** **Bloodstain pattern analysis**
N. Scott Henderson, B.S., CLPE
Objectives: Define basic terminology utilized in bloodstain pattern analysis; discuss bloodstain pattern types; discuss information that can be gained from bloodstain pattern analysis; discuss the limitations of bloodstain pattern analysis
- 10:45-11:15** **The life and legacy of Dr. John Coe**
Garry Peterson, M.D., J.D.
Objectives: Review the early life, education and career of Dr. John Coe; identify Dr. Coe's contributions to death investigation in Minnesota, including his influence on postmortem toxicology; discuss Dr. Coe's contributions to the science of death investigation
- 11:15-11:30** **Visine: It gets the red out and so much more**
Mary Carr, M.D., FACEP
Objectives: Review the topical and oral effects of tetrahydrozoline, the active ingredient in Visine; discuss the multiple drugs including Visine that can be used to facilitate a sexual assault; associate with NMS labs as a site to obtain quantitative urine and serum tetrahydrozoline levels
- 11:30-12:30** **A prosecutor's perspective on the use of expert witnesses and science**
William Klumpp, J.D.
Objectives: Identify evidentiary rules governing expert witnesses; discuss evidentiary rules governing introduction of scientific evidence; identify when Frye-Mack hearings are necessary before the introduction of evidence about new scientific techniques or theories; summarize tactical considerations for prosecutors in the use of expert witnesses; indicate when Frye-Mack hearings are required and when they are not required before trial
- 12:30-1:30** **LUNCH (*included in registration fee*)**

- 1:30-2:30** **2003 Georgia tri-state crematory disaster**
Mark Koponen, M.D.
Objectives: Recognize the elements of a mass disaster; recognize that a disaster takes many forms and requires often unique responses; review the unique nature of the Georgia tri-state crematory disaster; discuss the response by the Georgia Bureau of Investigation State Medical Examiner's Office, the local coroner, local law enforcement, and federal agencies
- 2:30-3:15** **The role of forensic DNA analysis in cases involving missing and unidentified persons**
Catherine Knutson, M.S.
Objectives: Describe the Missing and Unidentified Persons DNA Program; explain what DNA is and why it is useful; explain the National Missing Persons DNA Database; identify how to sample selection; describe the information to include when submitting samples for DNA testing
- 3:15-3:30** **BREAK (*refreshments served*)**
- 3:30-4** **When the media demand answers**
Carolyn Marinan, B.A.
Objectives: Summarize the reality and value of the media; define how to work well with this critical agency; identify how to respond in a transparent manner; identify strategies to be more prepared in the moment; discuss that media can be your friend, not your enemy
- 4-4:15** **SAVE: A resource for coroners and medical examiners**
Susan Roe, M.D.
Objectives: Recognize the importance of utilizing additional resources for aiding families affected by suicides; tell about one medical examiner's office program for families of suicides
- 4:15-4:30** **Current issues and future directions**
Mary Ann Sens, M.D., Ph.D.
Objectives: Describe issues currently facing MN coroners and medical examiners; identify partners and legislative initiatives, including regional and national issues; discuss strategies and prioritize 2012 initiatives of MNCME
- 4:30 p.m.** **Closing remarks**
Susan Roe, M.D.

Faculty

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Retired

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American Donor Services

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Minnesota Regional Medical Examiner's Office

*denotes faculty and planning team member

Location

Earle Brown Heritage Center

Garden Center Ballroom

6155 Earle Brown Drive, Brooklyn Center, MN 55430

Plenty of free parking is available in surface lots at the Heritage Center. Maps and directions can be viewed and downloaded at <http://home.earthlink.net/~mc-mea>, or by visiting mapquest.com.

From Minneapolis or Saint Paul:

Take I-94 West to I-694 West to Shingle Creek Parkway exit. Follow cloverleaf around. Turn right onto Shingle Creek, left at second stoplight (Summit Drive North), left again one block at Earle Brown Drive. Follow around to the main entrance on your right.

Accommodations

The Crowne Plaza Minneapolis North

2200 Freeway Blvd. in Brooklyn Center

Rooms blocked for October 5-7, 2011, at a rate of \$85/night. This rate includes a full American breakfast, two complimentary drink tickets per room, and, if requested, a shuttle to Earle Brown Heritage Center. Space and special rate cannot be assured after September 28, 2011.

A link to room reservations can be found at <http://home.earthlink.net/~mc-mea> or by calling 763-566-8000 and mentioning the MN Coroners' & Medical Examiners' Association group rate.

Registration form (may be photocopied)

I will attend: Thursday, 10/6/11 **and/or** Friday, 10/7/11

Registration fee: \$260 to attend both days – lunch is included

I am a physician and have added **\$40**.

Optional Thursday lunch session:

Rural coroner practice: A unique opportunity to serve and provide a credible explanation *(To be eligible to participate in the lunch session from 12 - 1 p.m., you must have registered and paid. There is no additional fee for this session.)*

Optional Thursday evening session:

Practical forensic photography workshop. *(To be eligible to participate in the evening session from 6:30 – 8:30 p.m., you must have registered and paid. There is no additional fee for this session.)*

Name

Job title

Employer

County

Office address

(_____) _____

Office phone

(_____) _____

Office fax

COMPLETE e-mail address

NOTE: We will be distributing a list of attendees and their contact information to all conference participants. If you do not wish to be on this list, please check here.

Choice of lunch entrée for day 1 (served tableside at Earle Brown)

Please choose: Black Angus meatloaf **OR**

Wild mushroom ravioli

(Lunch on day 2 will consist of a Minnesota-style lunch buffet served at Earle Brown)

Special needs

Please advise us of any special needs you may have regarding facility access, hearing/vision, diet, etc. We will do our best to accommodate you!

Your comfort

Please dress in layers – room temperature is unpredictable.

Payment

Registration check or purchase order **MUST** accompany registration and be received no later than September 28, 2011. **NO REFUNDS** after September 30, 2011.

Make check payable to:

Minneapolis Medical Research Foundation (MMRF)

Return completed registration to:

Joan Jung, Seminar Coordinator

Hennepin County Medical Examiner's Office
530 Chicago Ave., Minneapolis, MN 55415

Phone: 612-215-6320

Fax: 612-466-9980

Videotaping and audiotaping are strictly prohibited during the conference.

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