



40th Annual **Forensic Science Seminar**

October 3–4, 2024

Presented by

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

Jointly provided by

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



MINNESOTA
MEDICAL
ASSOCIATION



Target audience

Physicians

Medical personnel

Attorneys

Law enforcement

Death investigators

Morticians/funeral directors

Continuing Education Credit

- **Legal (CLE)** 14 credits Approved
- **Minnesota Peace Officers Standards and Training (POST)** 14 credits Approved
- **North Dakota Peace Officers Standards and Training (POST)** Approved
- **Medical Examiner/Coroner Investigators (ABMDI)** 13.5 credits Approved
- **Medical (CME[‡], Nursing CEU[°])** 14 MMA credits Approved
- **Mortuary Science CEUs (MDH-MSS)** 14 credits Approved

[‡]This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Minnesota Medical Association and Minnesota Coroners' and Medical Examiners' Association. The Minnesota Medical Association (MMA) is accredited by the ACCME to provide continuing medical education for physicians.

The Minnesota Medical Association designates this live activity for a maximum of 14 AMA PRA Category 1 Credit(s)[™]. Physicians should claim only the credits 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 3, 2024



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

7:50–8 **Introduction**

Sarah Meyers, M.D.

8–8:45 **Vitreous Toxicology in Death Investigations**

Brian Besch, M.D.

Objectives: Understand the unique aspects of vitreous humor as a matrix for toxicology studies; Review the utility of vitreous toxicology in several death investigations through case-based learning; Become familiar with the limitations and complicating factors of vitreous toxicology

8:45–9:15 **NamUs (The National Missing and Unidentified Persons System)—The Who, What and Why for Missing Persons Cases**

Ann Marie Gross, M.S.

Objectives: Have an understanding of WHAT the NamUs program is; Learn WHO can benefit from using this program; Understand WHY the BCA is involved in this program

9:15–10:15 **Moving beyond the M.E. in me**

Brent Richter, MA

Acknowledge what is stressful in M.E. and me; Recognize what's going on in me, and why; Employ mitigation and self-care strategies to minimize the pain in me

10:15–10:30 **BREAK**

10:30–10:45 **ABMDI—Who, What, Where, Why and How**

Jackie Ulven, B.S.

Recognize the purpose and structure of ABMDI; Understand the importance of ABDMI certification; understand changes to the certification types and the new testing process

10:45–11 **2024 Legislative Update: Mortuary Science**

Joe Sellwood

Understand the Transfer Care Specialist legislation and the Natural Organic Reduction legislation; have a basic understanding of the changes to Minnesota's Mortuary Science laws, and understand some potential outcomes from the November election.

11–12

Anatomy of a Cold Hit Homicide: Part I

Chris Boeckers, Andrew Baker, M.D., Mark Ulrick, Michael Radmer, J.D., Darren Borg, J.D.

Define a cold hit homicide case and describe how such cases are investigated; Prepare to testify in a cold hit homicide case; Discuss the legal/constitutional issues that may arise from surrogate testimony in a cold hit homicide case; List advancements in forensic science that are instrumental in solving cold hit homicide cases

12–1

LUNCH *(included in registration fee)*

1–2

Anatomy of a Cold Hit Homicide: Part II

Chris Boeckers, Andrew Baker, M.D., Mark Ulrick, Michael Radmer, J.D., Darren Borg, J.D.

Define a cold hit homicide case and describe how such cases are investigated; Prepare to testify in a cold hit homicide case; Discuss the legal/constitutional issues that may arise from surrogate testimony in a cold hit homicide case; List advancements in forensic science that are instrumental in solving cold hit homicide cases

2–2:45

Fatalities-Like Chocolate for Water (but dead)

Amar Chakraborty, BHSc., M.D., FRCPC

Understand the physiology and pathophysiology of methemoglobinemia and hyponatremia; Understand diagnosis and management of hyponatremia and methemoglobinemia, including its new presence in overdose and suicides; Understand the mechanism, risks, benefits of methylene blue

2:45–3

BREAK *(refreshments served)*

3–3:30

Wrongful Convictions: Common Causes and Potential Cures

James Mayer, J.D.

Identify leading risk factors of wrongful convictions; Understand some of the legal/procedural and other obstacles that stand in the way of justice for the wrongfully convicted; Describe legal and other reforms needed to remedy or prevent wrongful convictions

3:30–4

Dyadic Deaths--Putting Two and Two Together

Lauren Huddle, M.D. and Owen Middleton, M.D.

Define dyadic death; interpret scene findings and history to support a dyadic death determination; recognize technologies that can assist in dyadic death investigations; consider the potential option for manner of death certification

4–4:30

A Son's Gift

Laurie Mahoney, B.A.

Understand how tragedy turned into action; Understand everyone has the ability to save and heal lives; Understand how grief can change lives

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.

Program — Day Two

Friday, October 4, 2024



7:50–8

Welcome Back!

Sarah Meyers, M.D.

8–8:15

Sudden Unexpected Death: Information informs Prevention

Leslie Seymour, M.D., MPH

Understand the role investigation plays in prevention efforts; Recognize important information to be communicated with SUIDI form

8:15–9

Fire and Death in a Cornfield: We All Know Nothing

Susan Roe, M.D., Andrea Bexell, CFI

Understand how to determine if a decedent was alive during a fire; Understand the importance of coordination in a fire death between the investigating agencies and the forensic pathologist; Understand factors in determining manner of death and that one does not always have all the answers

9–9:15

Gross and Histologic Comparison of Skull Fractures and Accessory Sutures of the Infant Skull

Agnieszka Rogalska, M.D.

Identify three atypical sutures of the skull; Explain the etiology of atypical sutures of the skull; List three radiologic features distinguishing atypical from typical sutures

9:15–10

Some Recollections from the Early Days of the Minnesota Coroners' and Medical Examiners' Association

Garry Peterson, M.D., J.D.

Understand how Mid-twentieth-Century medical practice and death investigation in Minnesota differed from today; Understand the early legislative priorities and accomplishments of the MC&MEA; Understand the goals and accomplishments of the organization and its early leaders

Program — Day Two *continued*

Friday, October 4, 2024



10–10:15 Documenting Gender Identity

Katherine Lindstrom, M.D.

Understand what gender identity means and the current terminology used; Understand why gender identity is important during a death investigation; Learn how gender identity is recorded in Minnesota

10:15–10:30 BREAK

10:30–11:15 Understanding Canada's Consular Services and Deaths Abroad

Estelle Arnaud-Battandier

Learn about consular services delivered by the Consulate General of Canada in Minneapolis; Understand the type of services delivered when a death abroad occurs; Know who to contact in case of a deceased Canadian citizen

11:15–12:15 Deconstructing a Murderer

William Brown, J.D., Sabrina Sims, Barry Irmen, Cristina Figueroa-Soto, PhD, Agnieszka Rogalska, M.D.

Recognize the advantages of multi-disciplinary investigation of a homicide; Identify gross features of bone consistent with dismemberment with a tool; Identify tools/ forensic sciences applicable to the confirmation of electronic data such as emails; Understand the construction of a case for presentation in court; explain the legal definition/criteria of intent

12:15–1:15 LUNCH *(included in registration fee)*

1:15–2:15 Deconstructing a Murderer

William Brown, J.D., Sabrina Sims, Barry Irmen, Cristina Figueroa-Soto, PhD, Agnieszka Rogalska, M.D.

Recognize the advantages of multi-disciplinary investigation of a homicide; Identify gross features of bone consistent with dismemberment with a tool; Identify tools/ forensic sciences applicable to the confirmation of electronic data such as emails; Understand the construction of a case for presentation in court; explain the legal definition/criteria of intent

2:15–3

Injuries and deaths from electrocution and lightning

Wai Szeto, M.D.

Understand the mechanisms of injury and physiological effects associated with electrocution, including the various pathways of electrical current through the human body and the resulting tissue damage; Explain the difference between alternating and direct current and the different injury patterns seen with both; Identify key findings indicative of electrocution-related deaths, such as characteristic postmortem changes and patterns of injury observed during autopsy examinations

3–3:15

BREAK (*refreshments served*)

3:15–3:30

A Rural Drowning: Don't Be a Sucker For a Good Story

Lorren Jackson, M.D.

Recognize several postmortem findings specific to water-related fatalities; Describe the natural history of an uncommon form of injury; Appreciate the interpretive value of detailed scene descriptions and/or photographs

3:30–4

Combining multiple public health data sources to understand the incidence of injuries associated with law enforcement encounters

Cory Cole, MPH

Explain the public health rationale for monitoring injuries of all intents that occur during law enforcement encounters; identify key public health data sources for tracking fatal and nonfatal injuries, and the limitations of each; describe potential research applications of standardized data across public health jurisdictions

4–4:15

The One with the Fecaloma

Rebecca Wilcoxon, M.D.

Recognize lesser known complications of chronic opioid use; Understand the different manner of death classifications between acute drug toxicity and complications of drug use; Appreciate the Medical Examiner's role in medical malpractice cases

4:15–4:30

A Case of Grievous Bodily Harm?

Andrew Layman, M.D.

Explain how investigation findings can influence postmortem ancillary testing; Apply scene findings to describe both internal and external blunt force injuries; Describe the implications of non-standard ancillary drug testing

Faculty

Estelle Arnaud-Battandier

Senior Consular Officer
Consulate General of Canada

Andrew M. Baker, M.D, FCAP

Chief Medical Examiner
Hennepin County Medical
Examiner's Office

Brian M. Besch, M.D.

Forensic Fellow
Hennepin County Medical
Examiner's Office

Andrea Bexell, CFI

Investigator, External
Training Coordinator
Minnesota State Fire
Marshal Division

Chris Boeckers

Special Agent (Retired)
Federal Bureau of
Investigations

Darren Borg, J.D.

Senior Assistant County Attorney
Hennepin County Attorney's Office

William L. Brown, J.D.

Deputy District Attorney
Dane County District
Attorney's Office

**Amar N. Chakraborty,
BHSc, M.D., FRCPC**

Toxicology Fellow
Regions Health Partners &
Minnesota Poison Control System

Cory Cole, MPH

Senior Violence Epidemiologist
Minnesota Department of Health

**Cristina Figueroa-Soto,
PhD, D-ABMDI**

Forensic Anthropologist
Director of Operations
Dane County Medical
Examiner's Office

Ann Marie Gross, M.S.

Technical Leader
Bureau of Criminal
Apprehension

Lauren N. Huddle, M.D.

Assistant Clinical Professor,
Department of Pathology
School of Medicine and
Health Sciences
University of North Dakota

Barry E. Irmien, D-ABMDI

Director of Operations- Retired
HRD K-9 Handler
Dane County Medical
Examiner's Office

Lorren Jackson, M.D.

Assistant Medical Examiner
Hennepin County Medical
Examiner's Office

Andrew Layman, M.D.

Assistant Medical Examiner
Mayo Clinic
Southern MN Regional
Medical Examiner's Office

Katherine Lindstrom, M.D.

Assistant Medical Examiner
Hennepin County Medical
Examiner's Office

Laurie Mahoney, B.A**James Mayer, J.D.**

Managing Attorney
Great North Innocence Project

Sarah Meyers, M.D.

President, MC&MEA
Assistant Medical Examiner
Hennepin County Medical
Examiner's Office

Owen Middleton, M.D.

Assistant Chief Medical Examiner
Hennepin County Medical
Examiner's Office

Garry F. Peterson, M.D., J.D.

Hennepin County Medical
Examiner Emeritus

Michael Radmer, J.D.

Managing Attorney
Hennepin County
Attorney's Office

**Brent Richter, MA, LPCC,
DAAETS, CTTS, CFRC**

Chief Executive Manager
Brent Richter Consulting, LLC

Susan J. Roe, M.D.

Clinical Professor, Department
of Pathology
School of Medicine and
Health Sciences
University of North Dakota

Agnieszka Rogalska, M.D.

Chief Medical Examiner
Dane County Medical
Examiner's Office

Joe Sellwood

Partner
Cook Strong Sellwood

Leslie Seymour, M.D., MPH

Senior Epidemiologist
Minnesota Department of Health

Sabrina Sims

Detective
Dane County Sheriff's Office

Wai Szeto, M.D.

Forensic Pathology Fellow
School of Medicine and
Health Sciences
University of North Dakota

Mark Ulrick

Quality Administrator
Minneapolis Police Department
Forensic Services Division

Jackie Ulven, B.S., F-ABMDI

Operations Manager
ABMDI Vice President
Hennepin County Medical
Examiner's Office

Rebecca M. Wilcoxon, M.D.

Assistant Medical Examiner
Hennepin County Medical
Examiner's Office

Seminar Planning Team

Andrew Baker, M.D.

Hennepin County Medical Examiner's Office

Lauren Huddle, M.D.

UND School of Medicine

Joan Jung, B.A.

Hennepin County Medical Examiner's Office

Catherine Knutson, M.S.

Bureau of Criminal Apprehension

Sarah Meyers, M.D.

Hennepin County Medical Examiner's Office

Owen Middleton, M.D.

Hennepin County Medical Examiner's Office

Miki Tufto

MN Funeral Directors Association

Jackie Ulven, B.S., F-ABMDI

Hennepin County Medical Examiner's Office



Visit the MC&MEA website

We invite you to visit the Minnesota Coroners' & Medical Examiners' Association website for the most up-to-date information on the 40th Annual Forensic Science Seminar.

mncmea.org



Location

Doubletree by Hilton—Park Place

**1500 Park Place Boulevard
St. Louis Park, MN 55416**

Plenty of free parking is available in surface lots at the Doubletree.

Accommodations

Doubletree by Hilton—Park Place

**1500 Park Place Boulevard
St. Louis Park, MN 55416**

October 2–3, 2024 at a rate of \$155/night. Space and special rates cannot be assured after September 11, 2024.

Room reservations can be made by calling 1-800-245-9190 and identifying themselves as members of the 40th Annual Forensic Science Seminar Group.

Registration for the 40th Annual Forensic Science Seminar

<https://secure.affinipay.com/pages/mncmea/2024conference>

Registration Category	Rate
Physician	\$380
Non-Physician	\$330



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. Past participants have indicated that the room temperature tends to be cold.

Videotaping and audiotaping are strictly prohibited during the conference.