

# Forensic Science Seminar

September 28-29, 2017

# **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









# **Visit our website!**

We invite you to visit the MC&MEA website for the most up-to-date information on the 34th 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://mncmea.org

# **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<sup>‡</sup>, Nursing CEU<sup>°</sup>)
- 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 providership 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 designates this live activity for a maximum of 15 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, September 28, 2017



#### 7 a.m. **REGISTRATION** (complimentary refreshments)

#### 7:15-7:30 Introduction

Lindsev Thomas, M.D.

#### How to Talk with the Press and Families about Suicide Deaths 7:30-8

Daniel Reidenberg, Psy.D.

Objectives: Learn best practice language for safely discussing suicides; describe actions and approaches to reduce the risk of copy-cat suicide; teach techniques to help those bereaved by suicide

#### 8-9 Officer-Involved Shooting Deaths: Unique Aspects of the Investigation and the Role of the Forensic Pathologist

Megan Quinn, M.D.

Objectives: Discuss the history of the investigation of deaths involving use of force in police custody; identify unique aspects of death investigations involving Officerinvolved shootings; describe the role of the forensic pathologist in Officer-involved shooting death investigations

#### 9-9:30 Water or Flame... Remains are the Same

Timothy Koch, B.S.

Objective: Understand the differences between traditional "flame" cremation versus optional "water" cremation

#### **BREAK** (refreshments served) 9:30-9:45

#### 9:45-10 **Rural Death Investigations**

Catherine Kamman, F-ABMDI

Objective: Recognize the challenges of death investigation in rural Minnesota

#### Trippin' on Tryptamines and other Mind Blowing Substances 10-10:30

Kirk Hughes, R.N., E.M.T., C.S.P.I.

Objectives: Identify agents that are classified as Tryptamines; recognize morbidity and mortality associated with these substances; discuss basic pathophysiology of tryptamines and other hallucinogenics

#### 10:30-11 **Fire Fatalities: A Case Study**

Owen Middleton, M.D.; Jerry Streich, B.S., CFEI

Objectives: Identify some of the examination challenges with victims who suffer a death as a result of a fire; introduce the basic elements of fire science

#### 11-12 Part I — Barway Collins: A Missing Child, a Murdered Son, and a **Father Prosecuted**

Stephanie Revering, M.A.; Amy Sweasy, J.D.

Objectives: Examine the disappearance and murder of 10 year old Barway Collins; understand the complex police investigation, including the use of new technology, intense media and public interest; learn about the collaboration of partners and agencies, and how to work with an immigrant community

#### 12-1 **LUNCH** (included in registration fee)

### 1-2 Part II — Barway Collins: A Missing Child, a Murdered Son, and a **Father Prosecuted**

Stephanie Revering, M.A.; Amy Sweasy, J.D.

Objectives: Examine the disappearance and murder of 10 year old Barway Collins; understand the complex police investigation, including the use of new technology, intense media and public interest; learn about the collaboration of partners and agencies, and how to work with an immigrant community

#### 2-3 Investigation and Prosecution of Drug-related Deaths

Peter Lin, M.D.: Eric Woodford, J.D.

Objectives: Understand the role of the medical examiner/coroner in investigating drugrelated deaths; understand the challenges of certifying some types of drug-related deaths (delayed deaths, etc.); understand the challenges of prosecuting drug-related deaths; understand the specific prosecutorial challenges presented by drug-related deaths involving multiple controlled substances

#### **BREAK** (refreshments served) 3-3:15

#### 3:15-3:30 Perfecting our Partnership: The Minnesota Paper Cut Project

Molly Mulcahy Crawford, M.B.A.

Objectives: Recognize the benefits of electronic death registration; describe security features that protect professionals who provide the cause of death and MEs and Coroners who authorize disposition; illustrate system functionality that improves the accuracy, completeness, and timeliness of death records

#### A Multiagency Response: Four perspectives on Emerging Trends in the 3:30-4:30 **Overdose Crisis**

Sara Love, PhD; Travis Olives, M.D., M.P.H., M.Ed.; Kenneth Solek; Rebecca Wilcoxon, M.D.

Objectives: Understand law enforcement & medical examiner challenges when investigating & certifying overdose deaths; discuss critical care and rational antidotal therapy in the post-heroin world; describe potential gaps and mitigation strategies in toxicology testing for novel compounds

#### **CONCLUSION OF DAY ONE** 4:30

#### 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, September 29, 2017



#### **REGISTRATION** (complimentary refreshments) 7 a.m.

### **Overview of Mass Fatality Response for Rural Communities** 7:30-9

Arbie Goings, A.S.

Objectives: Explain how a mass fatality response differs from daily medical legal operations; describe the important factors to consider in formulating a response; provide an overview of the three operational components of a response

#### **Identification via Social Media** 9-9:45

Lieutenant Jeff Rugel, B.A.

Objectives: Understand the capabilities and limitations inherent in using open source and social media information in investigations; see real-world examples of the use of social media information in identifying previously unknown subjects; understand the way information from multiple sources can be combined to increase certainty; understand the ways other investigative agencies can assist in open source & social media based investigations

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

#### **Child Physical Abuse Mimics** 10-10:45

Arne Graff, M.D.

Objectives: Recognize potential accidental and medical mimics of abuse-like injuries; develop understanding of differential and workup for abusive physical injuries

#### New Mexico—The Land of Enchantment: A Collection of Interesting and 10:45-11 Unusual Cases

Rebecca Asch-Kendrick, M.D.

Objectives: Illustrate the variety of autopsy investigations in a statewide system

#### 11-12 Part I — Divine Intervention: Solving and Prosecuting the Brutal Murder of Earl Olander

David Hunt, J.D.; Mark Metz, J.D.; A. Quinn Strobl, M.D.; Christina Wagner, B.S.

Objectives: Illustrate through an actual murder case the investigation, autopsy and prosecution of the case

#### **LUNCH** (included in registration fee) 12-1

#### 1-1:45 Part II — Divine Intervention: Solving and Prosecuting the Brutal Murder of Earl Olander

David Hunt, J.D.; Mark Metz, J.D.; A. Quinn Strobl, M.D.; Christina Wagner, B.S.

Objectives: Illustrate through an actual murder case the investigation, autopsy and prosecution of the case

### 1:45-2 **Utility of Forensic Examination of Human Skeletal Elements at Autopsy:** It's not just for generating a biological profile

Walter Kemp, M.D., PhD

Objectives: With examples, describe the utility of removal of bones at autopsy for the purpose of trauma analysis; describe the use of cranial reconstruction to aid in the interpretation of blunt force and gunshot and shotgun wounds of the head

### 2-2:15 Who Speaks for the Dead? The Epidemiological Impact of Religious **Objections to Autopsy**

Nate Wright, MPH

Objectives: Understand the importance of accurate cause of death information as the fundamental health statistic; identify the impact the religious objection to autopsy legislation has had on death certificates and cause of death reporting; recognize the importance of working with families to accommodate their autopsy requests

#### 2:15-2:45 **Digital Evidence**

Donald Cheung, M.S.

Objectives: Understand what digital evidence is – how to recognize it, how to handle it in a safe manner; safequard and preserve digital evidence in its original form; understand types of information we can retrieve from individual devices; understand some of the liability issues that computer crime presents

#### **BREAK** (refreshments served) 2:45-3:00

#### 3-3:15 **Lights Out**

Lorren Jackson, M.D.

Objectives: Discuss the details of an interesting case of electrocution; review basic principles of electric power; and recognize features of electrical injury possibly encountered during death scene investigation and autopsy

#### **Columbia Shuttle Disaster— How it Affected the Community** 3:15-3:45 Arbie Goings, A.S.

Objectives: Provide an overview of the incident; illustrate how it affected the local residents; describe how the community came together to support the response

#### 3:45-4 **Be Careful What You Go Looking For**

Andrew Baker, M.D.

Objectives: Explain the general approach to performing an autopsy when a death is in a jail or prison; describe the range of blood levels seen when investigating methamphetamine-related deaths; know the morphological characteristics and life cycle of Ascaris lumbricoides

#### 4:00 p.m. **CLOSING REMARKS**

Lindsey Thomas, M.D.

# **Faculty**

#### Rebecca Asch-Kendrick, M.D.

**Assistant Medical Examiner** Midwest Medical Examiner's Office

#### Andrew Baker, M.D.

Board of Directors, MC&MEA Chief Medical Examiner Hennepin County Medical Examiner's Office

### Donald Cheung, M.S.

Special Agent in Charge Minnesota Bureau of **Criminal Apprehension** 

### Molly Mulcahy Crawford, M.B.A.

State Registrar Minnesota Department of Health

### Arbie Goings, A.S.

Owner Goings Consulting Services, LLC

### Arne Graff, M.D.

Medical Director, Child & Family Advocacy Program Mayo Clinic

### Kirk A. Hughes, R.N., E.M.T., C.S.P.I.

Certified Poison Information Specialist Minnesota Poison Control System Death Investigator Hennepin County Medical Examiner's Office

#### David Hunt, J.D.

First Assistant County Attorney Carver County Attorney's Office

#### Lorren Jackson, M.D.

Board of Directors, MC&MEA **Assistant Medical Examiner** Hennepin County Medical Examiner's Office

### Catherine Kamman, F-ABMDI

Chief Death Investigator Midwest Medical Examiner's Office

### Walter Kemp, M.D., PhD

Board of Directors, MC&MEA Associate Professor of Pathology University of North Dakota School of Medicine and Health Sciences

# Timothy Koch, B.S.

Board of Directors, MC&MEA Owner/Operator Metro First Call

### Peter Lin, M.D.

**Assistant Professor of Laboratory** Medicine and Pathology Mavo Clinic

### Sara Love, Ph.D.

Associate Director for Clinical Chemistry, Toxicology, and Point of Care Testing Hennepin County Medical Center

### Mark Metz, J.D.

County Attorney Carver County Attorney's Office

#### Owen Middleton, M.D.

Board of Directors, MC&MEA Assistant Chief Medical Examiner Hennepin County Medical Examiner's Office

#### Travis Olives, M.D., M.P.H., M.Ed.

Faculty Physician, **Emergency Medicine** Hennepin County Medical Center Associate Medical Director Minnesota Poison Control System

### Megan Quinn, M.D.

Forensic Fellow Hennepin County Medical Examiner's Office

### Daniel Reidenberg, Psv.D.

**Executive Director** Suicide Awareness Voices of Education (SAVE)

### Stephanie Revering, M.A.

Chief of Police Crystal Police Department

### Lieutenant Jeff Rugel, B.A.

Commander: Strategic Information Center Minneapolis Police Department

#### **Kenneth Solek**

**Assistant Special Agent** in Charge, DEA **United States Department** of Justice

### Jerry Streich, B.S., CFEI

Fire Chief/Emergency Manager City of Andover

### A. Quinn Strobl, M.D.

Board of Directors, MC&MEA Chief Medical Examiner Midwest Medical Examiner's Office

### Amy Sweasy, J.D.

Senior Attorney, Adult Prosecution Hennepin County Attorney's Office

### Detective Christina Wagner, B.S.

Criminal Investigator Carver County Sheriff's Office

#### Rebecca Wilcoxon, M.D.

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

### Eric Woodford, J.D.

Chief Deputy Attorney Olmsted County Attorney's Office

### Nate Wright, MPH

SAMHSA/CSTE Applied **Epidemiology Fellow** Minnesota Department of Health

# **Seminar Planning Team**

# Lindsey Thomas, M.D.

**Program Chairperson** 

### Andrew Baker, M.D.

Hennepin County Medical Examiner's Office

# Anne Bracey, M.D.

Midwest Medical Examiner's Office

### Joan Jung

Hennepin County Medical Examiner's Office

#### Tim Koch

Metro First Call

### Melissa Lallak

Hennepin County Medical Examiner's Office

# Owen Middleton, M.D.

Hennepin County Medical Examiner's Office

### Jackie Ulven

Hennepin County Medical Examiner's Office

# 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. Maps and directions can be viewed by visiting mapquest.com.

# **Accommodations**

# **Doubletree by Hilton—Park Place**

1500 Park Place Boulevard St. Louis Park, MN 55416

September 27–28, 2017 at a rate of \$135/night. Space and special rate can not be assured after September 13, 2017.

Room reservations can be made by calling 1-800-245-9190 and mentioning the 34th Annual Forensic Science Seminar Group.

# Registration form for the 34th Annual Forensic Science Seminar

I will attend: ☐ Thursday, 9/28/17 and/or ☐ Friday, 9/29/17

	Registra	ation Category	Early Rate On or before August 31, 2017	<b>Regular Rate</b> On or after September 1, 2017
	Physicia	n	\$350	\$390
	Non-Ph	ysician	\$310	\$340
	I would	like a printed copy of the handouts.	\$40	\$40
Registration fee includes lunch.		cludes lunch.	Total Amount paid:	
Name			Job title	
Employer			County	
Office ad	ldress			
( Office ph			() Office fax	
COMPLE	ETE e-mail	address		
		uting a list of attendees and their contact informat on this list, please check here. $\square$	tion to all conference participants.	
Choice	of lunch	n entrée for day 1 (served tablesi	ide at Doubletree by Hilto	n Hotel)
Please	choose:			
Lunch on day 2 will consist of a Italian huffet corved at Doubletroe by Hilton Hotel				

# **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 15, 2017. **NO REFUNDS** after September 18, 2017.

Make check payable to:

# **Hennepin County Medical Examiner**

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.