

PATHOLOGY/BIOLOGY

Wednesday

Poster Session

11:30 AM – 1:00 PM	11	Fatal Pesticide Ingestion Involving Boric Acid: A Case Report and Review of the Literature <i>Ashley Lukefahr, MD*</i>
11:30 AM – 1:00 PM	12	WITHDRAWN
11:30 AM – 1:00 PM	13	A Sudden Unexpected Death From a Rupture of the Pulmonary Artery in Patients With Systemic Autoimmune Diseases <i>Sharon Duzioni, MD*; Donna Gherardi, MD; Paolo Nozza, MD; Francesco Ventura, MD, PhD</i>
11:30 AM – 1:00 PM	14	An 11-Year Review of Fall Deaths Due to Head Trauma Reported in Shelby County, TN <i>Madison Benton, BS*; Erica Curry, MD</i>
11:30 AM – 1:00 PM	15	Cause and Manner of Death in New Mexico's Unhoused Population, 2014–2018 <i>Elyssa Glassheim, MD*; Lauren Dvorscak, MD; Sarah Lathrop, DVM, PhD; Garon Bodor, MS; Neil Greene, PhD</i>
11:30 AM – 1:00 PM	16	Under Pandemic Pressure: A Four-Year Review of Suicidal Deaths in Shelby County, Tennessee, With Emphasis on the Effect of COVID-19 <i>Jacob Williams*; Scott Collier, DM; Danielle Harrell, DO</i>
11:30 AM – 1:00 PM	17	A Case of Death Resulting From an Unrecognized Wilms Tumor in a 4-Year-Old Child <i>Isabella Caristo, MD*; Rosario Barranco, MD, PhD; Paolo Nozza, MD; Francesco Ventura, MD, PhD</i>
11:30 AM – 1:00 PM	18	Considerations of Decedent General Health Parameters During Determination of Cause of Death in Persons Abusing Substances <i>Clare Hartman*; Chandler M. Grant, MS; Michael W. Johnson, MD, PhD</i>
11:30 AM – 1:00 PM	19	Fat Embolism Syndrome in a Patient With Osteogenesis Imperfecta: A Textbook Case <i>Francesco Carravetta, DM*; Marcello Benevento, MD; Cristina Caterino, DM; Simona Nicoli, DM; Antonio Straface, MD; Laura Ambrosi; Biagio Solarino</i>
11:30 AM – 1:00 PM	110	Ligature Strangulation Utilizing Cable Ties: An Unusual Means of Suicide in Italy <i>Roberta Mercuri, MD*; Valentina Calamano, MD; Federica Gamba, MD; Francesco Ventura, MD, PhD; Camilla Tettamanti, MD, PhD</i> <i>(FSF Emerging Forensic Scientist Award Poster Presentation)</i>
11:30 AM – 1:00 PM	111	Chasing Euphoria: When Butane Inhalation Leads to Death <i>Naomi Iacononi, MD*; Julia Lazzari, MD; Carla Occhipinti, MD; Ilaria Marcacci, MD; Aniello Maiese, PhD; Fabio Stefanelli, PhD</i>
11:30 AM – 1:00 PM	112	Acute or Chronic Myocarditis? Or Is It Budd-Chiari Syndrome? A Peculiar Case of Multi-Organ Failure in a Subject With SARS-CoV2 Infection <i>Eleonora Mezzetti, MD*; Matteo Leoni, MD; Giulia Berneschi, MD; Arianna Baronti, MD; Naomi Iacononi, MD*; Marco Di Paolo, MD</i>
11:30 AM – 1:00 PM	113	Anosmia and COVID-19: The Search for the Virus in the Brain Through Immunohistochemical Investigations With the Anti-SARS-CoV-2 Antibody <i>Stefania De Simone, MD*; Maria Antonella Bosco, MD; Giacani Elena, MD; Gurgoglione Giovanni, MD; Isabella Di Marzo, MD; Raffaele La Russa, MD, PhD*; Luigi Cipolloni, MD*</i>

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- 11:30 AM – 1:00 PM **I14** **Oxidative Stress Markers in the Human Brain and Placenta May Reveal the Timing of Hypoxic-Ischemic Injury: Evidence From an Immunohistochemical Study**
Benedetta Baldari, MD; Margherita Neri, MD PhD*; Giacani Elena, MD; Stefania De Simone, MD*; Rinaldi Giuseppe, MD; Vittorio Simona, MS*; Luigi Cipolloni, MD**
- 11:30 AM – 1:00 PM **I15** **Starvation-induced Hepatocyte Changes: Light and Electron Microscopy Findings in Two Pediatric Homicide Cases**
Maria Elisa Smith, MD; Zabiullah Ali, MD*
- 11:30 AM – 1:00 PM **I16** **Macrophage Activation Syndrome Following Administration of the ChAdOx1 nCoV-19 Vaccine: A Case Study**
Corinne La Spina; Giuseppe Davide Albano; Giuliana Malandrino, MD; Giovanni Cannella; Dario Scaglione, MD; Emiliano Maresi; Stefania Zerbo*
- 11:30 AM – 1:00 PM **I17** **A Delayed Traumatic Intracranial Hemorrhage With Antithrombotic Medication: A Report of an Autopsy Case and Verification in an Animal Model**
*Kazuhiko Kibayashi, MD**
- 11:30 AM – 1:00 PM **I18** **Delayed Traumatic Rupture of the Spleen in a Patient with Mantle Cell Non-Hodgkin Lymphoma: Histopathological and Immunohistochemistry Aspects**
Giuseppe Davide Albano; Vanessa Milazzo, MD; Mario Spano, MD; Maria Puntarello; Emiliano Maresi; Stefania Zerbo; Antonina Argo*
- 11:30 AM – 1:00 PM **I19** **Combined Mechanical Asphyxia by Strangulation and Immobilization of the Chest in a Case of Matricide**
Francesca Consalvo, MD; Matteo De Simone*; Martina Padovano, MD; Matteo Scopetti, MD; Pasquale Ardovino, MD; Alessandro Santurro, MD, PhD**
- 11:30 AM – 1:00 PM **I20** **Unknown Heart Disease and Sudden Cardiac Death: The Role of Postmortem Investigations**
Matteo Antonio Sacco, MD; Margherita Sgroi, MD; Luca Calanna, MD; Maria Cristina Verrina, MD; Giulio Pulpito, MD*; Alessandro Pasquale Tarallo, MD*; Wandamaria Mazzuca; Pietrantonio Ricci, PhD, MD; Isabella Aquila, PhD, MD**
- 11:30 AM – 1:00 PM **I21** **Sudden Cardiac Death in a Man With a Functioning Implantable Cardioverter-Defibrillator**
Federica Ministeri, MD; Federico Privitera, MD; Grazia Giulia Pantè; Cristoforo Pomara, MD*
- 11:30 AM – 1:00 PM **I22** **Unraveling Unusual Mediastinal Anatomy Alterations Through Postmortem CT and Multiparametric 3-D Reconstructions: A Case Series of Major Trauma**
Mauro Midiri; Giuseppe Davide Albano; Corinne La Spina; Maria Puntarello; Valeria Giglio, MD; Erika Serena Sorrentino; Giuseppe Io Re; Antonina Argo*
- 11:30 AM – 1:00 PM **I23** **The Role of Optical Coherence Tomography in Sudden Cardiac Death: Insights and Future Perspectives in Forensic Sciences Through a Case Series of Spontaneous Coronary Artery Dissection**
Giovanni Gurgoglione, MD; Maria Antonella Bosco, MD*; Giuseppe Rinaldi, MD*; Stefania De Simone, MD; Elena Giacani, MD; Luigi Cipolloni, MD*; Francesco Prari, MD, PhD**
- 11:30 AM – 1:00 PM **I24** **The Role of Radiological Investigations and the Postmortem Laboratory in an Enigmatic Suicide Case: Between Doubts and Certainties**
Isabella Aquila, PhD, MD; Matteo Antonio Sacco, MD*; Alessandro Schettini; Valerio Riccardo Aquila; Maria Cristina Verrina, MD; Luca Calanna, MD*; Felice Francesco Carabellese, MD*

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Thursday

Poster Session

- 11:30 AM – 1:00 PM **I25** **A Case of Dismemberment in Italy: A Multidisciplinary Approach to Put the Pieces Together**
*Luca Diani, MD**; *Michele Carpinteri, MD*; *Laura Camilla Gasparini, MD*; *Giada Rovito, MD*;
Irene Pradelle, MD; *Enrica Callegari, LM*; *Rosa M. Gaudio, MD, PhD*;
Giovanni Cecchetto, MD, PhD; *Margherita Neri, MD PhD*; *Omar Bonato, MD*
- 11:30 AM – 1:00 PM **I26** **A Rare Case of Homicide by Air Rifle**
*Joshua Smith, PhD**; *Tiffany Hollenbeck, DO*
- 11:30 AM – 1:00 PM **I27** **The Cerulean Man: A Case of Argyria**
*Alfonzo Halfin**; *Todd M. Luckasevic, DO*; *Karl E. Williams, MD, NPH*
- 11:30 AM – 1:00 PM **I28** **Analysis of a Case of Neonatal Precipitation: Feticide or Infanticide?**
*Francesca Consalvo, MD**; *Matteo De Simone**; *Pasquale Ardivino, MD*;
Martina Padovano, MD; *Matteo Scopetti, MD*; *Alessandro Santurro, MD, PhD**
- 11:30 AM – 1:00 PM **I29** **Death Due to Aggression by Maremman Dogs: The Role of Forensic Sciences in the Reconstruction of the Case**
*Matteo Antonio Sacco, MD**; *Francesco Maria Galassi*; *Elena Varotto, PhD*;
Laura Landini, MA; *Maria Cristina Verrina, MD**; *Luca Calanna, MD*; *Wandamaria Mazzuca**;
*Roberto Raffaele**; *Pietrantonio Ricci, PhD, MD*; *Isabella Aquila, PhD, MD**
- 11:30 AM – 1:00 PM **I30** **A Case of Fatal Hemorrhage: Natural or Violent Death? A Deceptive Crime Scene**
*Gennaro Baldino, MD**; *Cristina Mondello, MD*; *Giorgia Burrascano, MD**;
Domenicantonio Iannello, MD; *Alessio Asmundo, MD*; *Elvira Ventura Spagnolo, MD**
- 11:30 AM – 1:00 PM **I31** **Transorbital Orbitocranial Penetrating Injuries (TOPI): A Report of Two Cases**
Tancredi Dino Mario, MD; *Bibbò Roberta, MD**; *Benedetta Baldari, MD*;
*Maria Antonella Bosco, MD**; *Carpano Francesco, MD*; *Moro Diego, MD*; *Luigi Cipolloni, MD**
- 11:30 AM – 1:00 PM **I32** **Complex Suicide by Gunshot and Hanging**
*Eugenio Jacopo Piero Gallotti, MD**; *Dario Galatone*; *Chiara Franzetti, MD*; *Mattia Arturi, MS*;
Luca Tajana, MD; *Matteo Moretti, MD*; *Gulnaz T. Javan, PhD*; *Silvia D. Visonà, MD, PhD*;
Luca Morini, PhD
- 11:30 AM – 1:00 PM **I33** **Black Esophagus and Diabetic Ketoacidosis: A Report of an Autopsy Case**
*Nicolo' Vernazza, MD**; *Cristiano Micera, MD*; *Francesca Buffelli, MD*;
Francesco Ventura, MD, PhD; *Camilla Tettamanti, MD, PhD*
- 11:30 AM – 1:00 PM **I34** **A Blunt Force Injury to the Chest Caused by Firework Misuse: A Case Report**
*Roa Alqabbani**; *Melissa A. Brassell, MD*
- 11:30 AM – 1:00 PM **I35** **Frail Elder Abuse in Long-Term Care Facilities: A Suspected Case of Atypical Asphyxia**
*Roberta Mercuri, MD**; *Filippo Spigno, MD*; *Sara Lo Pinto, MD*; *Francesco Ventura, MD, PhD*
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 11:30 AM – 1:00 PM **I36** **Sudden Death Secondary to Colloid Cyst of the Third Ventricle: A Case Review**
*Erin Flaherty**; *Christine James, DO*; *Amanda O. Fisher-Hubbard, MD*; *Allison L. Deemter, MA*

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- 11:30 AM – 1:00 PM **I37** **Marjolin’s Ulcers in the Forensic Setting: When Cancer Becomes a Homicide**
Kamilah Fernandez, MD; Stephanie A. Dean, MD*
- 11:30 AM – 1:00 PM **I38** **Oxidative Stress in Sepsis: A Focus on Cardiac Pathology**
Giuseppe Bertozzi, MD; Raffaele La Russa, MD, PhD*; Domenico Martinelli, MD, PhD; Santina Cantatore, MLT; Luigi Cipolloni, MD**
- 11:30 AM – 1:00 PM **I39** **Blunt Force Trauma and Aspiration of Gastric Contents: What Is the Cause of Death? An Unusual Case**
Luca Tomassini; Anna Maria Manta, MD*; Piergiorgio Fedeli; Cristiana Gambelunghe, PhD; Massimo Lancia, MD*
- 11:30 AM – 1:00 PM **I40** **Dealing With a Massive Number of Victims Due to an Accidental Fire**
*Amir Hamuod**
- 11:30 AM – 1:00 PM **I41** **Bee-Ware of MDPHP: A Case of Intoxication by Synthetic Cathinones Resulting in Hundreds of Bee Stings**
Jacopo Chirillo, DM; Pietro Clemente C. Salmoirago, MD; Claudia Carelli; Mirella Sabatino, MD; Valeria Prandini, MD; Greta Seveso, DM; Simone Turpini, MD; Carlo Previderè; Luca Tajana, MD; Luca Morini, PhD*
- 11:30 AM – 1:00 PM **I42** **When a Nursing Home Turns Into a Killing Home—Forensic Aspects of Serial Murder in Health Care: A Case of a Serial Killer Nurse**
Federica Spina, MD; Giacomo Visi, MD*; Eleonora Mezzetti, MD; Andrea Costantino, MD; Antonello Di Paolo, MD; Silvio Chericoni, PhD; Fabio Stefanelli, PhD*
- 11:30 AM – 1:00 PM **I43** **Respiratory Illness Surveillance in Suspected Drug-Related Deaths**
Abigail J. Grande, BS, MPH; Asmaa Obead, MBChB, MPH; Gemma Harkin, BS, MPH; Joyce L. deJong, DO; Amanda O. Fisher-Hubbard, MD; Christine M. Pink, PhD*
- 11:30 AM – 1:00 PM **I44** **Comparing Manner of Death in Georgia Prison and Jail Populations**
Alexander Yue, BS, BA; Rachel Geller, MD; Sandra P. Reynolds, MD; Ashley Garrish*
- 11:30 AM – 1:00 PM **I45** **The Effect of Preservation, Time, and Temperature on DNA Recovery of Blow Fly Specimens (Diptera: Calliphoridae)**
Kathryn Melancon; Sydnee N. Wedel, BSc; Jonathan J. Parrott, PhD*
- 11:30 AM – 1:00 PM **I46** **The Succession of Invertebrate Communities Involved in Swine Decomposition in Freshwater Environments in Italy**
Andrea Benassi, PhD, MS; Gloria Raise; Nicholas Lorusso; Denise Gemmellaro, PhD**
- 11:30 AM – 1:00 PM **I47** **The Persistence of DNA in Water From an Actively Decomposing Cadaver for Human Identification**
Anna Mae Adkins, BS; Rachel Houston, PhD; Sheree R. Hughes, BSc, PhD; Haeli Kennedy, BS; Hannah K. Cervenka, BS*

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Thursday—Session I

2024 Jay Dix Lecture Series

Moderator: Michael Graham, MD

9:00 AM – 9:10 AM	I107	2024 Jay Dix Day Memorial Lecture Series <i>Michael A. Graham, MD*</i> ; <i>Joseph A. Prahlow, MD*</i> ; <i>Andrew Baker, MD*</i> ; <i>James L. Caruso, MD*</i> ; <i>Susan F. Ely, MD*</i> ; <i>Katherine Maloney, MD*</i> ; <i>James R. Gill, MD*</i>
9:10 AM – 9:50 AM	I107	Postmortem Changes <i>Joseph A. Prahlow, MD*</i>
9:50 AM – 10:15 AM		BREAK
10:15 AM – 11:05 AM	I107	Firearm Injuries <i>Andrew Baker, MD*</i>
11:05 AM – 12:00 PM	I107	Deaths Involving Watery Environments <i>James L. Caruso, MD*</i>
12:00 PM – 2:00 PM		BREAK
2:00 PM – 2:50 PM	I107	Asphyxia <i>Susan F. Ely, MD*</i>
2:50 PM – 3:05 PM		BREAK
3:05 PM – 3:55 PM	I107	Not Just Small Adults: Essentials of Pediatric Pathology <i>Katherine Maloney, MD*</i>
3:55 PM – 5:00 PM	I107	Sharp Force Injuries <i>James R. Gill, MD*</i>

Thursday—Session II

COVID-19 and Other Causes of Death

Moderator: Gregory Schmunk, MD

Co-Moderator: Amir Hamoud, MD

8:30 AM – 8:45 AM	I48	Death From Angioedema With Anaphylaxis and COVID-19 <i>Lakshmanan Sathyavagiswaran, MD*</i> ; <i>Richard Ou, MD</i> ; <i>J Daniel Augustine, MD</i>
8:45 AM – 9:00 AM	I49	Deaths Due to COVID-19 Infection in Children and Young People Aged 0–19 at the Harris County Institute of Forensic Sciences in Houston, Texas <i>Jennifer L. Ross, MD*</i>
9:00 AM – 9:15 AM	I50	Drowning Associated With Carbon Monoxide Toxicity in the Setting of Recreational Boating <i>Reba Sue Cherian, DO*</i> ; <i>Leticia Schuman, MD</i> ; <i>Brad Hall, PhD</i> ; <i>J. Keith Pinckard, MD, PhD</i> (FSF Emerging Forensic Scientist Award Oral Presentation)

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9:15 AM – 9:30 AM	I51	A Cornucopia of Death by Gas: Fatalities Involving Organic and Inorganic Gases <i>Hannah C. Jarvis, MBBS, MRCS*; Gregory Dickinson, MD, MS</i>
9:30 AM – 9:45 AM	I52	The Postmortem Utility of Neuron-Specific Enolase and S100B for Differentiating Traumatic Brain Injury From Other Causes of Death <i>Siddhartha Das, MD*; Ramaswamy N, MD; Vinod Ashok Chaudhari, MD; Prashant Shankarrao Adole, MBBS, MD; Sreerexha J, MD; Harichandrakumar, KT, MD</i>
9:45 AM – 10:00 AM	I53	The Clarksburg Insulin Murders <i>Paul S. Uribe, MD*; Katherine A. Grosso, MA, BS*; Colin F. Davis*; Keith G. Vereb*; Jarod Douglas*</i>
10:00 AM – 10:15 AM	I54	A Complex Suicide With Over 250 Sharp Force Injuries and Falling From Height <i>Maya Neumann*; Wolfgang Grellner, MD</i>
10:15 AM – 10:30 AM		BREAK

Pediatric Deaths

Moderator: Jolee Suddock, DO

Co-Moderator: Michael Harrell, MD

10:30 AM – 10:45 AM	I55	Medicolegal Pediatric Natural Deaths: Causes of Death and Demographics <i>John W. Powell, MD*; Hannah C. Jarvis, MBBS, MRCS; Melissa M. Blessing, DO</i>
10:45 AM – 11:00 AM	I56	An Unusual Form of Sudden Infant Death in the Arctic <i>Cristin Marie Rolf, MD*</i>
11:00 AM – 11:15 AM	I57	Child Abuse Diagnostic Work-Up: Let's Put on Our Thinking Caps <i>Anita Sammarco, MD*; Pierpaolo Di Lorenzo, MD; Maria Pieri; Mariagrazia Marisei, MD; Gaetano Di Donna, MD; Fabio Policino; Emanuele Capasso, MD; Massimo Niola, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)</i>
11:15 AM – 11:30 AM	I58	Suicides in Childhood and Adolescence: A Ten-Year Study From Jefferson County, Alabama <i>Nicola Pigaiani, MD*; Daniel W. Dye, MD; Daniel S. Atherton, MD; Francesco Ausania, MD, PhD; Federica Bortolotti, MD, PhD; Gregory G. Davis, MD, MSPH; Brandi C. McCleskey, MD</i>
11:30 AM – 11:45 AM	I59	Changes to the Certification of Sudden Unexplained Deaths in Infants From 2012 to 2023 <i>Amanda Lynne Marinello, BS*; Brandi C. McCleskey, MD</i>
11:45 AM – 12:00 PM	I60	A Histological Examination of the Uterus to Confirm Early Pregnancy in Female Homicide Victims <i>Marianne Hamel, MD, PhD*; Andrew F. Falzon, MD, MCS</i>
12:00 PM – 1:00 PM		BREAK

Case Reports

Moderator: Owen Middleton, MD

Co-Moderator: Quinn Demik, MD

1:00 PM – 1:15 PM	I61	Multiple Shots of Different Firearms in a Charred Corpse: A Case Report <i>Mattia Arturi, MS*; Martina Demasi, MD; Nicolas Martinelli; Pierangela Grignani; Francesca Freni, MS; Yao Chen, MD</i>
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PATHOLOGY/BIOLOGY

1:15 PM – 1:30 PM	162	A Macro and Micro Time-Dependent Washer Woman Wrinkling and Reversibility Trivialized in a Bathtub Drowning: A Case Presentation <i>Pete Speth, MD*</i>
1:30 PM – 1:45 PM	163	Complete Laryngotracheal Separation Without Decapitation in a Case of Hanging: An Uncommon Phenomenon <i>Nilesh Keshav Tumram, MBBS, MD*</i>
1:45 PM – 2:00 PM	164	One House, Two Bodies: A Case Series and Considerations for Investigating Companion “Double Deaths,” Including Challenges in the “Philemon and Baucis” Syndrome <i>Deland Weyrauch, MD*; Christopher Borck, MD</i>
2:00 PM – 2:15 PM	165	A Diamond in the Rough—Myocardial Infarction as a Complication of “Near Hanging” in an Adolescent: An Exceptionally Rare-Find Case Report <i>Barbara Iga Smyk, DM*; José Jerónimo Fonte-Santa da Silva</i>
2:15 PM – 2:30 PM	166	A Macro and Micro Time-Dependent Washer Woman Wrinkling and Reversibility in a Bathtub Drowning Case: 20th-Century German Research Proves Innocence <i>Pete Speth, MD*</i>
2:30 PM – 2:45 PM	167	Deaths Involving Forklifts in Cook County, Illinois: A Retrospective Review <i>Megan Kinn, DO, MS*; Lorenzo Gitto, MD; David M. Waters, MD</i>
2:45 PM – 3:00 PM	168	Myocardial Scarring and Interstitial Fibrosis: An Unknowable, Unpredictable, and Unavoidable Tragedy <i>Gerald Feigin, MD*; Priya Banerjee, MD; Gil Sapir, JD, MSc</i>
3:00 PM – 3:15 PM	169	Death by Lung Hypoplasia as a Result of a Bilateral Congenital Diaphragmatic Hernia <i>Maya Neumann*; Wolfgang Grellner, MD</i>
3:15 PM – 3:30 PM		BREAK

Interdisciplinary Approach

Moderator: Gregory Schmunk, MD

Co-Moderator: Lorenzo Gitto, MD

3:30 PM – 3:45 PM	170	Utilizing an In-House Forensic Epidemiologist in the Denver Office of the Medical Examiner <i>Ami L. Jackson, DO*; Meredith A. Frank, MD; Ethan Jamison, MPH; James L. Caruso, MD; Ian J. Puffenberger, MD; Sterling J. McLaren, MD</i>
3:45 PM – 4:00 PM	171	A Multidisciplinary Approach to the Canonical Recognition Activities Conducted on the Bone Remains Attributed to St. Hippolytus and the Martyrs Crescentius and Irenaeus (4th Century AD) <i>Francesca Consalvo, MD*; Alessandro Santurro, MD, PhD*; Carmen Sementa, MD; Chantal Milani, DMD, PhD; Francesca Motta; Francesco La Sala, MD; Sergio Brogna, MD</i>
4:00 PM – 4:15 PM	172	A Death in the Setting of Diabetic Ketoacidosis and Concurrent SGLT2 Inhibitor Use <i>Christopher Sullivan*; Angelina Phillips, MD</i>
4:15 PM – 4:30 PM	173	WITHDRAWN

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- 4:30 PM – 4:45 PM **I74** **Investigating Equine-Related and Bovine-Related Human Fatalities in Oklahoma**
*Kaylan Peterson, MS**; *Wayne D. Lord, PhD*; *Ross J. Miller, BA, MD*; *Mark R. McCoy, EdD*;
Timothy Dwyer, MSFS; *Amber L. Fortney, MS*; *Sean Laverty*
(FSF Emerging Forensic Scientist Award Oral Presentation)
- 4:45 PM – 5:00 PM **I75** **The Perils of Body Size Assumption in Subadult Sibling Death Identifications**
*John B. Nase, DDS**
- 5:00 PM – 5:15 PM **I76** **The Prevalence of Ethanol and Drugs Detected in Road Traffic Deaths: A Ten-Year Survey From Jefferson County, Alabama**
*Nicola Pigaiani, MD**; *Brandi C. McCleskey, MD*; *Daniel S. Atherton, MD*; *Daniel W. Dye, MD*;
Giacomo Musile, PhD; *Federica Bortolotti, MD, PhD*; *Gregory G. Davis, MD, MSPH*;
Karen S. Scott, PhD
- 5:15 PM – 5:30 PM **I77** **The Graveyard Spiral and the Day the Music Died**
*Edmund R. Donoghue, MD**

Thursday—Session III

Multidisciplinary Session: Pathology/Biology and Toxicology

Moderator: Robert Johnson, PhD

Co-Moderator: Rhonda Mittenzwei, MD

- 1:00 PM – 1:15 PM **L52** **2C or Not Tusi? The Emergence of a New Drug Combination in Miami**
*Rocio Potoukian, BS**; *Diane Moore, PhD*; *Kenneth Hutchins, DM*
- 1:15 PM – 1:30 PM **L53** **The Frequency and Analysis of Kratom in Postmortem Cases**
*William M. Schroeder, II, MS**; *Donna M. Papsun, MS*; *Justin Brower*
- 1:30 PM – 1:45 PM **L54** **Postmortem Diagnosis of Ketoacidosis: The Importance of Beta-Hydroxybutyrate Quantification as Part of Routine Toxicological Screening at Autopsy**
*Jeroen Roosendaal, MSFS**; *Astrid Christiaens, MD*; *Kiki Van Langen, MD*;
Ingrid Bosman, PhD, MSFS
- 1:45 PM – 2:00 PM **L55** **A Case Series of Suicides by Sodium Azide Ingestion: An Update**
*Ingrid Bosman, PhD, MSFS**; *Roelof Oosting, MD*; *Dick-Paul Kloos, MD*; *Bart Ruiter*;
Jeroen Roosendaal, MSFS; *Kristof Maudens, MHA, BS*
- 2:00 PM – 2:15 PM **I78** **I Didn't Want to Kill Him! The Role of Cocaine in Pseudoasphyxia by Compression of the Carotid Sinus**
*Eleonora Mezzetti, MD**; *Matteo Leoni, MD*; *Andrea Costantino, MD*; *Carla Occhipinti, MD*;
Rebecca Pieretti, MD; *Aniello Maiese, PhD*
- 2:15 PM – 2:30 PM **I79** **Not So Much the "Spice" of Life: Identifying a Source for a Series of MDMB-4en-PINACA Deaths**
*Michael Chaump, MD**; *Robert Johnson, PhD*; *Aria McCall, BS*; *Kei Osawa, MFS*;
Steven J. Hemberger, DO; *Mark E. Shelly*; *Richard Fries*; *Dana Hopson, MD*
(FSF Emerging Forensic Scientist Award Oral Presentation)
- 2:30 PM – 2:45 PM **I80** **Elevated Beta-Hydroxybutyrate Within a Pediatric Population and Its Associated Pathology: A Retrospective Case Series**
*Nasim Haghbandish, MDCM, PhD**; *Chris Milroy, MD, LLB*; *Jacqueline Parai, MD*;
Anthea Lafreniere, MD

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- 2:45 PM – 3:00 PM **I81** **Pediatric Fatalities Due to Methadone Toxicity in Cook County, Illinois: Considerations on the Manner of Death**
*Lorenzo Gitto, MD**; *Daniel S. Isenschmid, PhD*; *Ponni Arunkumar, MD*

Friday

Poster Session

- 11:30 AM – 1:00 PM **I82** **Postmortem Interval Estimation Using MiRNAs: A Forensic Application**
*Paurabhi Singh, MSc**; *Uma Shankar Singh, MD*; *Sangeeta Kumari, MD*
- 11:30 AM – 1:00 PM **I83** **Recombinase Polymerase Amplification (RPA) for the Identification of Canine and Chicken Blood Samples**
*Julian L. Mendel**; *Hanna Mellul*; *DeEtta Mills, PhD*
- 11:30 AM – 1:00 PM **I84** **The Development of Real-Time and Digital PCR Kits for Simultaneous Quantification of Human and Bacterial DNA From Biological Evidence**
*Ji-Woo Lee**; *Hye-Seon Cho*; *Ha-Eun Cha*; *A-Jeong Jeon*; *Si-Keun Lim*
- 11:30 AM – 1:00 PM **I85** **A Retrospective Review of Genetic Testing and Its Impact on Cause of Death**
*Larissa Ybanez, BS, BA**; *Stacey Murthy, MD*
- 11:30 AM – 1:00 PM **I86** **The Impact of Mouthwash on Microbiome Associated With Human Saliva and Its Implication in a Bacterial Signature-Based Body Fluid Identification Method**
*Grace Cavanaugh, MS**; *Baneshwar Singh, PhD**; *James P. Brooks*; *Sarah Seashols Williams, PhD*; *Denise Wohlfahrt, PhD*
- 11:30 AM – 1:00 PM **I87** **The Forensic Application of Monoclonal Anti-Human Glycophorin A (AntiGPA) Antibody in Samples From Decomposed Bodies to Establish Vitality of the Injuries: An Experimental Study**
*Benedetta Baldari, MD**; *Elena Giacani, MD**; *Giovanni Gurgoglione, MD*; *Jeannet Cappitelli, MD*; *Giovanni Pollice, MD*; *Francesca Carpano, MD*; *Frati Paola, MD**
- 11:30 AM – 1:00 PM **I88** **A Metagenomic Approach in Forensic Science for Human Identification Among a North Indian Population**
*Sangram Sandhu, MSc**; *Niraj Rai, PhD*; *Pooran Chand, MDS*
- 11:30 AM – 1:00 PM **I89** **An Extracorporeal Tissue Degradation Model to Investigate PMI Markers**
Stefan Pittner, PhD; *Eileen Holzer, BS**; *Fabio Monticelli, PhD*; *Peter Steinbacher*; *Jane Harris, PhD*
- 11:30 AM – 1:00 PM **I90** **When Immunohistochemistry Acquitted the Defendant: A Particular Scuba-Diving Death**
*Luca Sussetto, MD**; *Elisa Olivetta, MD*; *Barbara Abenante, MD*; *Giancarlo Di Vella, MD, PhD**
- 11:30 AM – 1:00 PM **I91** **The Value and Versatility of Histology in the Forensic Autopsy: Changing Cases From Suspicious to Natural Causes**
*Joanne Hanna, BAS**; *Yeliena Baber, FRCPath, FRCPA*
- 11:30 AM – 1:00 PM **I92** **Evaluating the Spatial Relationship Between Microhemorrhages and Axonal Injury**
*Rhonda M. Mittenzwei, MD**; *Heather Maioli, MD*; *Chiara Maffei, PhD*; *Karinn R. Sytsma, BA*; *Desiree Marshall, MD*; *Caitlin S. Latimer, MD, PhD*; *C. Dirk Keene, MD, PhD*; *Christine Mac Donald, PhD*; *Amber Nolan, MD, PhD*; *Brian Edlow, MD*

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- 11:30 AM – 1:00 PM **I93** **The Role of Thiols in Putrefaction: An Analysis of Biochemical Interactions in Forensic Cases**
*Isabella Aquila, PhD, MD**; *Claudia Catia De Pasquale*; *Matteo Antonio Sacco, MD**;
Maria Manno, MD; *Saverio Gualtieri, MD*; *Lucia Tarda, MD*; *Luca Calanna, MD**;
*Maria Cristina Verrina, MD**; *Wandamaria Mazzuca*; *Pietrantonio Ricci, PhD, MD*
- 11:30 AM – 1:00 PM **I94** **Iatrogenic Injuries Due to Endoscopic Techniques: The Role of Medicolegal Analysis for Forensic Purposes**
*Matteo Antonio Sacco, MD**; *Maria Manno, MD*; *Angelica Zibetti, MD*; *Umberto Rosini, MD*;
*Maria Cristina Verrina, MD**; *Lucia Tarda, MD*; *Antonio Pallante, MD*; *Luca Calanna, MD*;
Pietrantonio Ricci, PhD, MD; *Isabella Aquila, PhD, MD**
- 11:30 AM – 1:00 PM **I95** **Neonatal Traumatic Deaths: Differentiating Homicidal and Accidental Cases by a Multidisciplinary Approach**
*Aromatario Mariarosaria, MD PhD**; *Benedetta Baldari, MD*; *Francesco Carpano, MD**;
*Moro Diego, MD**; *Luigi Cipolloni, MD**; *Fineschi Vittorio, MD, PhD**; *Tartaglione Tommaso, MD**
- 11:30 AM – 1:00 PM **I96** **Post-Traumatic Intracranial Aneurysms of Anterior Circulation: Always a Challenge in the Forensic Field**
*Gabriele Napoletano, MD**; *Fabio Del Duca, MD*; *Giacomo Visi, MD*; *Federica Spina, MD*;
Eleonora Mezzetti, MD; *Alessandra De Matteis*; *Aniello Maiese, PhD**
- 11:30 AM – 1:00 PM **I97** **Analyzing the Past to Help Shape Our Children’s Futures: A Ten-Year Review of Pediatric Deaths in Arapahoe County, Colorado**
*Emma Selner, DO**; *Casey Bitting, DO**
- 11:30 AM – 1:00 PM **I98** **Scuba Diving, Extreme Sports, and Undetected Cardiac Pathologies. Is There a Need for Further Clinical Examinations to Make These Activities Safer for Health?**
*Eleonora Mezzetti, MD**; *Federica Spina, MD**; *Ilaria Marcacci, MD*; *Rebecca Pieretti, MD*;
Matteo Leoni, MD; *Marco Di Paolo, MD*
- 11:30 AM – 1:00 PM **I99** **Death by Frostbite: From Theory to Reality**
*Stefano Duma, MD**; *Federica Mele, MD*; *Mariagrazia Calvano, MD*; *Mirko Leonardelli, MD*;
Enrica Macorano, MD; *Giovanni De Gabriele, MD*; *Alessandro Cristalli, MD*; *Francesco Introna*
- 11:30 AM – 1:00 PM **I100** **Too Hot to Handle: A Review of Carbon Monoxide Levels in Fire Fatalities**
*Olivia Ostermann, BS**; *Stacey Murthy, MD*
- 11:30 AM – 1:00 PM **I101** **Smoke and Mirrors: A Bullet-less Intraoral Gunshot Wound**
*Nicole Burgin, BS**; *Natasha Grandhi, MD*; *Sandra P. Reynolds, MD*
- 11:30 AM – 1:00 PM **I102** **The Management of Deaths in Railway Stations: Investigation Methodologies and Safety Prospects for Public Health**
*Matteo Antonio Sacco, MD**; *Vincenzo Maria Ritorto, MD*; *Fabrizio Cordasco, MD*;
Carmen Scalise, PhD, MD; *Maria Cristina Verrina, MD**; *Roberto Raffaele**; *Luca Calanna, MD**;
Pietrantonio Ricci, PhD, MD; *Isabella Aquila, PhD, MD**
- 11:30 AM – 1:00 PM **I103** **The Analysis of Gunshot Wounds in Gun Tests on Biological Matrices: An Experimental Study on Pig Heads**
*Isabella Aquila, PhD, MD**; *Massimo Musardo*; *Massimo Lupo*; *Roberto Raffaele**;
*Matteo Antonio Sacco, MD**; *Luca Calanna, MD**; *Maria Cristina Verrina, MD**;
Saverio Gualtieri, MD; *Lucia Tarda, MD*; *Antonio Pallante, MD*; *Wandamaria Mazzuca**;
Mariachiara Mili
- 11:30 AM – 1:00 PM **I104** **WITHDRAWN**

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- 11:30 AM – 1:00 PM **I105** **Penile Torsion as a Method of Identification**
Fernanda Da Silva Iameira, MD; Nicole M. Masian, MD; Wendy M. Gunther, MD*
- 11:30 AM – 1:00 PM **I106** **The Role of the Forensic Laboratory in the Investigation of Postmortem Cardiac Markers for the Diagnosis of the Cause of Death: A Comparison of Forensic Utilities**
Matteo Antonio Sacco, MD; Vincenzo Maria Ritorto, MD; Melanie Rouse, DPA; Jan Gorniak, DO; Maria Cristina Verrina, MD*; Luca Calanna, MD; Margherita Sgroi, MD; Serena Coda; Wandamaria Mazzuca*; Santo Gratteri, PhD, MD; Isabella Aquila, PhD, MD**

Forensic Entomology

Moderator: Lavinia Iancu, PhD

Co-Moderator: Nicolette Ras, BS

- 8:30 AM – 8:45 AM **I108** **Necrophagous Insect Species Succession on Decomposed Pig Carcasses During North Dakota's Summer Months**
Lavinia Iancu, PhD; Rebecca Simmons, PhD; Tiberiu Sahlean, PhD; Malia R. Wellens, BS; Ranjana Mosby, BS*
- 8:45 AM – 9:00 AM **I109** **The Effects of Common Insecticides on Blow Fly (Diptera: Calliphoridae) Oviposition in the Field**
Teomie S. Rivera-Miranda, BSc, MSc; Krystal R. Hans, PhD*
- 9:00 AM – 9:15 AM **I110** **It Boils Down to This: An Initial Evaluation, Using the Forensically Important Blow Fly *Cochliomyia Macellaria*, on the Usefulness of Gene Expression Following the Common Method of Boiling Larvae**
*Joshua Smith, PhD**
- 9:15 AM – 9:30 AM **I111** **Baits, Bodies, and Bugs: An Analysis of Forensic Entomology in Arizona**
Lauren Weidner, PhD; Andrew Meeds*
- 9:30 AM – 9:45 AM **I112** **Feline Forensics: Revealing the Unique Decomposition and Forensically Relevant Blow Flies (Diptera: Calliphoridae) Associated With Cats**
Kelly Bagsby, MS, BS; Krystal R. Hans, PhD*
- 9:45 AM – 10:00 AM **I113** **How Can Forensic Entomology Contribute to Solving Rhinoceros Poaching in South Africa?**
Ian R. Dadour, MSc, PhD; Melanie Pienaar, BSc; Christopher W. Weldon, PhD*
- 10:00 AM – 10:15 AM **I114** **Winter Decomposition in North Dakota and Vertebrate Scavengers**
Lavinia Iancu, PhD; Nicolette Ras, BS*
- 10:15 AM – 10:30 AM **BREAK**

Forensic Entomology and Omics

Moderator: Ian Dadour, PhD

Co-Moderator: Kristi Bugajski, PhD

- 10:30 AM – 10:45 AM **I115** **Assessing the Impacts of Prescription Medications and Metabolites on Larval Blow Fly Development**
Hayden S. McKee-Zech, MSc; Charity G. Owings, PhD; Dawnie W. Steadman, PhD*
- 10:45 AM – 11:00 AM **I116** **A Decade Into Developing a Microbiome Tool for Predicting the Postmortem Interval: Where Are We Now and Where Are We Going?**
Jessica Lynne Metcalf, PhD; Zachary Burcham, PhD; Rob Knight, PhD; David O. Carter, PhD*

PATHOLOGY/BIOLOGY

11:00 AM – 11:15 AM	I117	Understanding Seasonal Differences in Postmortem Microbiome Development for Forensic Practice <i>Anthony Grigsby*</i> ; Kelly Waters; M. Eric Benbow, BS, PhD; Jennifer L. Pechal, PhD; Bethany Mikles, BSc, MS (FSF Emerging Forensic Scientist Award Oral Presentation)
11:15 AM – 11:30 AM	I118	Microbiome Across the Pond: Decomposition in North Dakota Extreme Winter Temperatures Versus United Kingdom Summer Temperatures and Their Effect on the Microbiome for PMI Estimation <i>Noemi Procopio, PhD, MSc*</i> ; Lavinia Iancu, PhD*; Andrea Bonicelli, PhD, MA
11:30 AM – 11:45 AM	I119	Developing a Multi-Omics Bone Biomolecular Signature by Integrating Metabolomics, Lipidomics, and Proteomics to Estimate Postmortem Interval <i>Andrea Bonicelli, PhD, MA*</i> ; Noemi Procopio, PhD, MSc
11:45 AM – 12:00 PM	I120	A Metabolomics Investigation of Postmortem Human Pericardial Fluid <i>Alberto Chighine, MD*</i> ; Matteo Stocchero; Giulio Ferino, PhD; Fabio De-Giorgio, MD; Matteo Nioi, MD; Celeste Conte, MD; Ernesto d'Aloja, MD, PhD; Emanuela Locci, PhD
12:00 PM – 1:00 PM		BREAK

Forensic Omics and Pathology/Biology Standards

Moderator: Noemi Procopio, PhD

Co-Moderator: Krystal Hans, PhD

1:00 PM – 1:15 PM	I121	Infant Postmortem Microbiome Biomarkers: An Initial Survey <i>Jennifer L. Pechal, PhD*</i> ; Bethany Mikles, BSc, MS; Heather Jordan, PhD; M. Eric Benbow, BS, PhD; Carl Schmidt, MD, MPH
1:15 PM – 1:30 PM	I122	A Longitudinal Study for PMI Estimation Via GC/MS Metabolomics Applied to Porcine Muscle Tissue <i>Andrea Bonicelli, PhD, MA*</i> ; Halima Al-Balushi, BSc; Zoha Khan-Perveen, BSc; Alberto Chighine, MD; Irene van Zwieten, BSc; Peter Cross, MSc; Noemi Procopio, PhD, MSc
1:30 PM – 1:45 PM	I123	The Mass Grave Project: The Impact of Freezing and Burial on Personal Identification Through Human DNA Analysis <i>Sarah Gino, MD*</i> ; Giulia Sguazzi, MA, BA; Moya McCarthy-Allen, BSc, MSc; Nicole Colombo; Daniel Wescott, PhD; Timothy P. Gocha, PhD; Noemi Procopio, PhD, MSc; Hayley L. Mickleburgh, PhD
1:45 PM – 2:00 PM	I124	The Recovery of Corpses From Aquatic Environments: Procedural Standards to Maximize Evidence Recovery <i>Denise Gemmellaro, PhD*</i> ; Andrea Zaferes, BA*; Gloria Raise
2:00 PM – 2:15 PM	I125	WITHDRAWN
2:15 PM – 2:30 PM	I126	Standards Development Activities in Medicolegal Death Investigation and Forensic Pathology <i>J. Keith Pinckard, MD, PhD*</i>
2:30 PM – 2:45 PM	I127	Systematized International Capacity Development for Forensic Pathology in Low-Resource Jurisdictions: A Proposed Model <i>Alfredo Eugene Walker, MBBS*</i>

PATHOLOGY/BIOLOGY

2:45 PM – 3:00 PM	I128	2023 State Legislative Encroachments Against Forensic Pathology Professionalism and Independence: Harbingers of Future Threats and Opportunity for Strategic Planning and Action <i>M.J. Menendez, JD*</i> ; <i>Joyce L. deJong, DO</i>
3:00 PM – 3:15 PM	I129	The 2022 NFLIS Medical Examiner and Coroner (MEC) Survey Findings <i>Bryan A. Ruggery, MFS*</i> ; <i>DeMia P. Pressley, MS</i> ; <i>Kelly Keyes, BS</i> ; <i>Katherine Bollinger, MS</i> ; <i>Hope M. Smiley-McDonald, PhD</i> ; <i>Megan R. Waggy, MA, BA</i> ; <i>Devon S. Cribb, MS</i>
3:15 PM – 3:30 PM		BREAK

Pathology/Biology Standards and Imaging

Moderator: Caroline Rowe, PhD

Co-Moderator: Tuyet Tran, DO

3:30 PM – 3:45 PM	I130	Preserving the Silent Witnesses: Ensuring Long-Term Maintenance of Insect Evidence in Forensic Investigations <i>Ian R. Dadour, MSc, PhD*</i> ; <i>Paola A. Magni, PhD</i> ; <i>Martin J.R. Hall, PhD</i>
3:45 PM – 4:00 PM	I131	The Toxic Workplace in Forensics <i>Paul S. Uribe, MD*</i>
4:00 PM – 4:15 PM	I132	But What Does It Mean? A Rationale for a Standardized Means of Death Classification System <i>Sarah Anderson, DO*</i> ; <i>Katarina M. Volkoff</i> ; <i>Brandi C. McCleskey, MD</i>
4:15 PM – 4:30 PM	I133	Plastic Bag Suffocation: A Case Series and an Effective Protocol Proposal <i>Anna Maria Manta, MD*</i> ; <i>Benedetta Baldari, MD*</i> ; <i>Stefania De Simone, MD*</i> ; <i>Pia Eugenia Ylenia Petrasso, MD*</i> ; <i>Gianluca Piras, MD*</i> ; <i>Luigi Cipolloni, MD*</i> ; <i>Valentina Milone, MD</i>
4:30 PM – 4:45 PM	I134	A Case of Ductus Venosus Agenesis (DVA) in a Stillborn Baby: The Postmortem Computed Tomography (CT) Scan and Autopsy Findings <i>Martina Demasi, MD*</i> ; <i>Chiara Franzetti, MD</i> ; <i>Luisa Andrello, MD, PhD</i> ; <i>Matteo Moretti, MD</i> ; <i>Rosa Maria Martinez</i>
4:45 PM – 5:00 PM	I135	Minimally Invasive Postmortem Autopsies Using CT-Guided Biopsies in Suspected Cases of Pneumonia: A Feasibility Study <i>Yonatan Carl, MD*</i> ; <i>Jamie Elifritz, MD</i> ; <i>Micheal Harrell, MD</i> ; <i>Kethery Haber, MHA, BS</i> ; <i>Sarah Lathrop, DVM, PhD</i> ; <i>Lauren Dvorscak, MD</i>
5:00 PM – 5:15 PM	I136	An Analysis of Autopsy-Radiology Discordance in Cases of Fatal Blunt Force Injury <i>Natalie L. Adolphi, PhD*</i> ; <i>Yi-Li Grace Wong, MD</i> ; <i>Jamie Elifritz, MD</i>