PATHOLOGY/BIOLOGY

Wednesday

Poster Session

11:30 am – 1:00 pm	**I1**	**A Matter of Seconds: A Case Report of a Flash Fire With Carbonization** Anna Antonia Capurso, MD*; Angela Colucci, MD; Sara Di Trani, MD; Alessandro Cristalli, MD; Antonio Marzaioli, MD; Mariapia Magistro, MD; Federica Mele, MD, PhD; Francesco Introna, MD, PhD
11:30 am – 1:00 pm	**I2**	**A Strange Case of a Single Stab Wound to the Heart: An Equivocal Manner of Death** Viviana Ghesini, MD*; Irene Pradelle, MD; Matilde Ruju, MD; Luca Dell'Amore, MD*; Letizia Alfieri, MD, PhD; Margherita Neri, MD, PhD; Matteo Marti, MS
11:30 am – 1:00 pm	**I3**	**"In-Cysting" on Proper Identification: Splenic Mesothelial Inclusion Cysts** David Jumes, DO*; Nea Fride, MD; Jamie Kallan, MD; Robert Corliss, MD
11:30 am – 1:00 pm	**I4**	**Abnormal Intrapartum Cardiotocographic Tracing, Fetal Outcome, and Placental Pathology** Eleonora Nardi, MD*; Simone Grassi, MD, PhD*; Andrea Costantino, MD; Serena Simeone, MD; Francesca Castiglione, MD; Antonio Oliva, MD, PhD; Vincenzo Arena, MD, PhD
11:30 am – 1:00 pm	**I5**	**An Evaluation of a Within-Transcript 3'/5' RT-qPCR Strategy for RNA-Based Estimation of Forensic Time Intervals** Young Cho, BS*; Tae Mo Kang, PhD; Ji Yun Shin, BS; Hae Min Goo, BS; Jin Hyuk Choi, MD; Kwang Soo Ko, MS; Seong Hwan Park, MD, PhD
11:30 am – 1:00 pm	**I6**	**Beyond the Autopsy: The Limits of Forensic Investigation in a Fatal Closed-Circuit Rebreather Diving Incident** Veronika Rybárová, MD, PhD*; František Novomeský, MD, PhD; Simon Mitchell, MD, PhD; Jim L. Caruso, MD
11:30 am – 1:00 pm	**I7**	**Chatbots in Forensic Reporting: Help or Threat?** Simone Grassi, MD, PhD; Andrea Costantino, MD*; Francesco De Micco, MD, PhD; Peter Cross, PhD; Noemi Procopio, PhD; Vilma Pinchi, PhD
11:30 am – 1:00 pm	**I8**	**Do Androids Dream of Medicolegal Reasoning? A Pilot Proof-of-Concept Study of Large Language Models in Firearm Wound Interpretation** Simona Pellerito, MD*; Ginevra Malta, MD, PhD; Mauro Midiri, MD; Antonina Argo, MD, PhD; Stefania Zerbo, MD, PhD
11:30 am – 1:00 pm	**I9**	**Fatal European Brown Bear Attacks: Injury Patterns and Forensic Characteristics** Richard Sivulič, MD, PhD*; Martin Janik, PhD; Katarína Hanzelyová, MSc; Ľubomír Straka, MD, PhD
11:30 am – 1:00 pm	**I10**	**Forensic Implications of Marjolin's Ulcer: A Report of Two Cases and a Review of the Literature** Lucilla De Luca, MD*; David M. Waters, MD; Lorenzo Gitto, MD
11:30 am – 1:00 pm	**I11**	**Integrative LC–MS Metabolomic Profiling and cpDNA Marker Optimization of Dendrobium Hybrids** Nisruti Anuja Behura, MSc*; Naga Jogayya Kothakota, PhD
11:30 am – 1:00 pm	**I12**	**Neurodegenerative Disorders and Cerebrovascular Diseases Identified at Autopsy: A Retrospective Review of Neuropathologic Findings and Medicolegal Implications** Ilaria Tarozzi, MD*; Michael Punsoni, MD

*Presenting Author

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11:30 am – 1:00 pm	**I13**	**Not an Infection, But an Injection: Fatal Silicone Embolism Syndrome Following Clandestine Cosmetic Filler Injection in an Immunocompromised Woman** David Forni, MD; Rebecca Maggi, MD*; Sara Giacomelli, MD; Margherita Sgroi, MD; Roberta Bibbò, MD; Giovanni Pollice, MD; Naomi Iacoponi, MD; Marco Di Paolo, MD
11:30 am – 1:00 pm	**I15**	**Standardized Insect Sampling Protocol Reveals Deviations From Succession Expectations at a Mid-Atlantic Human Taphonomic Facility** Kathleen E. Donovan, BA*; Rebecca Forkner, PhD
11:30 am – 1:00 pm	**I16**	**The Evolution of Large Language Models in Clinical Forensic Medicine: Have Artificial Intelligence Systems Improved in the Assessment of Suspected Sexual Assault?** Giovanni Aulino, MD*; luca cerra, MD; Francesca Cittadini, MD, PhD
11:30 am – 1:00 pm	**I17**	**The Mechanistic Approach to Trauma** Daniel L. Schultz, MD*
11:30 am – 1:00 pm	**I18**	**Trying to Establish a New Paradigm With the Help of Genetic Analysis for Investigating Sudden Cardiac Death in India: A Preliminary Study** Jatin Bodwal, MD*; Sudheer Kumar Arava, MD
11:30 am – 1:00 pm	**I19**	**Using Macroscopic Characteristics of Decomposition to Estimate the Postmortem Interval With GeoFOR** Katherine E. Weisensee, PhD*
11:30 am – 1:00 pm	**I20**	**A Case of Alveolar Capillary Dysplasia Unmasking a Fatal Sudden Infant Death in a Suspected Case of Co-Sleeping Asphyxia** Chiara Carsana, MD*; Francesca Buffelli, MD, PhD; Lorenzo Franceschetti, MD, PhD

Thursday

Poster Session

11:30 am—1:00 pm	**I28**	**The Impact of 16S rDNA Sequence Length Variation on the Microbiome Associated With Dental Calculus of Human Cadavers** Swara Jha*; Arian Karim, MS; Tal Simmons, PhD; Baneshwar Singh, PhD*
11:30 am—1:00 pm	**I29**	**A Case of Complex Suicide Involving Penetrating Head Injuries With a Nail Gun and Asphyxia By Hanging** Raul Ramirez Corona, MD*; Samantha Stephen, DO; Lorenzo Gitto, MD
11:30 am—1:00 pm	**I30**	**A Coronary Artery Aneurysm Rupture in Childhood: The Diagnostic Value of Forensic Histopathological and Molecular Analysis in a Fatal Case of Kawasaki Disease** Federica Genchi, MD*; Giovanni Pollice, MD; Luigi Cipolloni, PhD; Stefania De Simone, PhD; Roberta Bibbò, MD
11:30 am—1:00 pm	**I31**	**A Fatal Obstructive Fibrinous Tracheal Pseudomembrane Following Endotracheal Intubation in an 18-Year-Old Female** Ava S. Lewandowski, BA*; Adam Craig, MD
11:30 am—1:00 pm	**I32**	**A Fine Line: A Case Report on Fatal Acute Cocaine Toxicity** Taylor Miller, MD*; Kristy Waite, DO

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11:30 am—1:00 pm	**I33**	**A Forensic Reconstruction of Self-Immolation in a Rural Setting: Integrating Death Scene Investigation, Autopsy, Histopathology, and Toxicology** Gaia De Angelis, MD*; Maura Racciatti, MD; Alessandro Ghamlouch, MD; Biancamaria Treves, MD; Filippo Alessandro Montalto, MD; Gabriele Napoletano, MD, PhD; Fabio Del Duca, MD, PhD
11:30 am—1:00 pm	**I34**	**A Hairy Situation: The Presence of *Chrysomya Rufifacies* (Macquart, 1842) (Diptera: Calliphoridae) in Western New York** Denise Gemmellaro, MD, PhD; Katherine Maloney, MD
11:30 am—1:00 pm	**I35**	**A Multimodal Forensic Investigation of Sudden Cardiac Death Following Sexual Activity and Sildenafil Use** Elena de Laurentiis, MD*; Maria Chiara David, PhD; Silvio Chericoni, PhD; Raffaele Cirillo, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Stefano D'errico, PhD; Vittorio Fineschi, MD, PhD; Alessandro Santurro, MD, PhD*
11:30 am—1:00 pm	**I36**	**A Toxic Illusion: Suspected Vaping-Associated Lung Injury in a Death With Polysubstance Exposure** Giulia Riva, MD*; Matteo Moretti, MD, PhD; Vera Gloria Merelli, MD; Samuele Baldi, MD; Alessia Brandimarti, MD; Rosa Maria Martinez, MD
11:30 am—1:00 pm	**I37**	**A World on Fire: A Case Series of Suicides Via Self-Immolation in the United States and a Comparison to International Reports** Miguel Cadiz, MS*; Tatiana Bihun, MD; Joseph A. Prahlow, MD; Patrick E. Lantz, MD
11:30 am—1:00 pm	**I38**	**"Just a Little Prick": How an Incongruent Toxicology Result Helped to Uncover a Cause of Death of Olympic Proportions** Kendall M. Bailey, MBBS*
11:30 am—1:00 pm	**I39**	**Accidental Penetrating Injuries Mimicking Sexual Abuse in Prepubertal Children: A Series of Four Forensic Cases** Laura Avano, MD*; Luigia Cardone, MD; Antonietta Porzio, MD, PhD; Lorenzo Gitto, MD; Carlo Pietro Campobasso, APM; Attilio Mazzei, MD
11:30 am—1:00 pm	**I40**	**Always Have a Backup Plan: A Case of Complex Suicide** Caterina Petetta, MD; Niccolo D. Melloni, MD*; Greta Cena, MD*; Silvia Boca, MD; Edoardo Toffano, MD; Luana Bonaccurso, MD; Francesco Nebbia, MD; Marisa Mammero, MD; Roberto Testi, MD
11:30 am—1:00 pm	**I41**	**An 18-Year Review of Decedents Recovered From the Mississippi River and Associated Tributaries at the West Tennessee Regional Forensic Center** Annie M. Addison, APM*; Danielle K. Harrell, DO
11:30 am—1:00 pm	**I42**	**An Area-Based Analysis and Categorization of Pediatric Upper Airway Obstructions** Melody Y. Meng*; Saoirse Y. Teng; Elisa Dong, BA; Zhuo Wang, MD
11:30 AM – 1:00 pm	**I43**	**An Evaluation of Hand Microbiome Profiles Using LH-PCR and Machine Learning for ForensicApplications** Abraham Marquez, BS*; Ariana Vazquez Fernandez, BS; Kristyne Alarcon, BS; Fabiana Taglia, PhD; DeEtta Mills, PhD; Julian L. Mendel, PhD
11:30 am—1:00 pm	**I44**	**Beyond the Cell: A Multidisciplinary Forensic Approach to Deciphering Deaths in Custody** Roberto Raimo, MD*; Raffaele Cirillo, MD*; Elena de Laurentiis, MD*; Federico Battipaglia, MD*; Francesca Consalvo, MD*; Roberta Bibbò, MD; Giovanni Pollice, MD; Carmen Sementa, MD; Vittorio Fineschi, MD, PhD; Alessandro Santurro, MD, PhD*

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11:30 am—1:00 pm	**I45**	**Biomechanics and Forensic Insights of Traumatic Aortic Rupture Involving a Pedestrian** Siddhartha Das, MD*
11:30 am—1:00 pm	**I46**	**Bladder Distention-Induced Thromboembolism: A Rare Pelvic Compression Mechanism** Hannah C. Jarvis, MRCS(Eng)*
11:30 am—1:00 pm	**I47**	**Choking on a Food Bolus as a Complication of an Undiagnosed Vestibular Schwannoma** Daria Afromeeva, MD*; Rohan Burns*; David M. Waters, MD; Samantha N. Champion, MD; Lorenzo Gitto, MD
11:30 am—1:00 pm	**I48**	**Cranial Thickness in Forensic Populations: A Multimodal Morphological Investigation** Samuele Baldi, MD*; Matteo Moretti, MD, PhD; Luisa Andrello, MD, PhD; Silvia D. Visonà, PhD; Vera Gloria Merelli, MD; Rosa Maria Martinez, MD
11:30 am—1:00 pm	**I49**	**Dehydration and Recovery: Will DNA Survive the GenTegra Test?** Ava G. Harris*; Ahana Chatterjee, MS; Mayra Eduardoff, PhD
11:30 am—1:00 pm	**I50**	**Experimental Development to Examine the Impact of Burn-Induced Thermal Changes on the Development and Survival of *Lucilia Sericata* and *Phormia Regina* Larvae** Linnea N. Briley*; Dillon Gaines, BS; Sam Richards; Amanda Towne; Lily Vanderaa; Hayden S. McKee-Zech, PhD
11:30 am—1:00 pm	**I51**	**Fatal Butane Inhalation: The Contribution of Cardiac and Brain Immunohistochemical Markers** Giovanni Pollice, MD*; Roberta Bibbò, MD*; Maria Antonella Bosco, MD; Luigi Cipolloni, PhD; Margherita Neri, MD, PhD; Benedetta Baldari, PhD
11:30 am—1:00 pm	**I52**	**Fatal Cocaine Intoxication in a Body Packer: Clinical, Toxicological, and Medicolegal Implications of Intracorporeal Drug Transport** Maria Daniela Monterossi, MD*; Matteo Antonio Sacco, MD, PhD*; Saverio Gualtieri, MD, PhD*; Gioele Grimaldi, MD*; Mattia Solano, MD; Federica Riillo, MD; Roberto Raffaele, MSc; Giuseppe Chiaravalloti, MSc; Fabrizio Cordasco, MD, PhD; Isabella Aquila, MD, PhD*
11:30 am—1:00 pm	**I53**	**Fatal Iron Toxicity Following Ingestion of Prenatal Vitamins: An Autopsy Case Report** Hubert Small, MBBS*; Thomas Herb, MD
11:30 am—1:00 pm	**I54**	**Fingerprint Recovery in Human Cadavers: The Limitations of Conventional Techniques and a Proposal of a Condition-Specific Operational Protocol** Isabella Aquila, MD, PhD*; Giuseppe Chiaravalloti, MSc; Saverio Gualtieri, MD, PhD*; Maria Cristina Verrina, MD; Mattia Solano, MD*; Maria Daniela Monterossi, MD*; Pietro Tarzia, MD; Valerio Riccardo Aquila, MSc; Helenia Mastrangelo, MD; Roberto Raffaele, MSc; Federica Riillo, MD; Matteo Antonio Sacco, MD, PhD*
11:30 am—1:00 pm	**I55**	**Fire and Ice: A Fatally Low Oxygen Environment Driven by a Space Heater in a Poorly Ventilated Icehouse** Jack P. Ommen, MS*; Jason Martin, BS; David Keith Lee, BS; Karissa Prom, BSN; Andrea Bexell, BS; Selly Strauch, MD; Susan Roe, MD
11:30 am—1:00 pm	**I56**	**Foley Catheter-Assisted Hymenal Examination: The Strengths and Weaknesses in the Forensic Examination of Prepubertal Sexual Abuse** Luigia Cardone, MD*; Laura Avano, MD; Antonietta Porzio, MD, PhD; Carlo Pietro Campobasso, APM; Attilio Mazzei, MD

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11:30 am—1:00 pm	**I57**	**The Forensic Anthropological Detection of Fatal Skeletal Trauma in Motor Vehicle Crash Fatalities Using Postmortem CT: Reliability and Contributions to the Forensic Pathological Triage Process** Helen Litavec, PhD*; Miriam E. Soto Martinez, PhD; Jason M. Wiersema, PhD; Julie M. Fleischman, PhD
11:30 am—1:00 pm	**I58**	**From Scene to Autopsy: The Reconstructive Value of Medicolegal Scene Investigation in Seven Femicide Cases** Raffaele Cirillo, MD*; Elena de Laurentiis, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Giovanni Pollice, MD; Luigi Cipolloni, PhD; Alessandro Santurro, MD, PhD*
11:30 am—1:00 pm	**I59**	**Guns in Small Hands: A Case Series of Fatal Child-on-Child Shootings** Edward M. Quan, BA*; Joseph A. Prahlow, MD; Tatiana Bihun, MD; Katie Hanson, MD; Kanayo Tatsumi, MD
11:30 am—1:00 pm	**I60**	**The Hemorrhagic Effects of Ecstasy: A Rare Forensic Presentation of Fatal 3,4-Methylenedioxyamphetamine (MDMA) Toxicity** Antonio Grande, MD; Raffaele Cirillo, MD*; Elena de Laurentiis, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Martina Padovano, MD; Matteo Scopetti, MD, PhD; Alessandro Santurro, MD, PhD*
11:30 am—1:00 pm	**I61**	**Homicide or Misadventure? A Multidisciplinary Investigation of a Decomposed Body Found in a Locked Vehicle Trunk** Greta Cena, MD*; Francesco Cattaneo, MD; Edoardo Toffano, MD; Luana Bonaccurso, MD; Silvia Boca, MD; Caterina Petetta, MD; Niccolo D. Melloni, MD*; Roberto Testi, MD
11:30 am—1:00 pm	**I62**	**Integrated Postmortem Forensic Investigations in a Fatal Hypoglycemic Death in Insulin-Dependent Diabetes Mellitus** Raffaele Cirillo, MD*; Pietro Formisano, PhD; Giuseppe Perruollo, PhD; Elena de Laurentiis, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Vittorio Fineschi, MD, PhD; Alessandro Santurro, MD, PhD*
11:30 am—1:00 pm	**I63**	**Ligature Strangulation as an Unusual Method of Suicide** Ashley Leigh Smith, MD*; Daniel C. Butler, MD; Angelina Phillips, MD
11:30 am—1:00 pm	**I64**	**Measuring the Developmental Stages of *Lucilia Sericata*** Amanda Towne*; Hayden S. McKee-Zech, PhD
11:30 am—1:00 pm	**I65**	**Misoprostol as an "Ideal" Agent for Illegal Abortion: A Forensic Case With Misleading Circumstances** Sharon Duzioni, MD*; Donna Gherardi, MD; Francesca Buffelli, MD, PhD; Alessandro Bonsignore, MD, PhD
11:30 am—1:00 pm	**I66**	**Non-Thrombotic Embolism in Forensic Practice: An Exploratory Case Series and Proposal of the NTESS Conceptual Framework** Roberta Bibbò, MD*; Stefania De Simone, PhD*; Giovanni Pollice, MD*; Chiara Fabrello, MD; Francesco Orsini, MD
11:30 am—1:00 pm	**I67**	**Picking Up the Pieces: The Importance of Case Coordination in Fragmentation Deaths** Lillian Johnson, BA*; Olivia Johnson, BS; Spencer Gordon, BA; Lance V. Truong, DO; Susan Roe, MD; Selly Strauch, MD

PATHOLOGY/BIOLOGY

Thursday—Session I

Forensic Entomology/Wildlife Forensics

Moderator: Lavina Iancu, PhD — Co-Moderator: Christopher "Kit" Kiefer, MD

8:30 am – 8:50 am	**I21**	**A New Scavenger on the Scene: Introducing Harvestmen (Opiliones: *Phalangium opilio*) to the Human Scavenger Guild** Amanda L. Joslyn, MS*; Jane C. Harris, PhD
8:50 am – 9:10 am	**I22**	**An Update on Wildlife Forensic Biology Standards Development Activities** Jason Byrd, PhD*; Tasha Bauman, MS
9:10 am – 9:30 am	**I23**	**Arthropod-Related Studies at the Forensic Anthropology Research Facility (FARF), Texas State University, San Marcos, Texas** Ian R. Dadour, PhD*; Tennyson B. Nkhoma, MASc; Scott H. Fortney, MSc; Kate Spradley, PhD; Daniel J. Wescott, PhD; Gabriella Dimitra Rakopoulou, MSc
9:30 am – 9:50 am		**BREAK**
9:50 am – 10:10 am	**I24**	**Magic Goat: The Case of the Missing Cecum** Kristen Shekelle, DVM; Fausto Bellezzo, DVM; Jake Trautmann, DVM; Laura Bryan, PhD, DVM*
10:10 am – 10:30 am	**I25**	**The Effects of Cocaine Exposure on the Microbiome of *Calliphora vicina* Robineau-Desvoidy (Diptera: Calliphoridae) Adults** Lavinia Iancu, PhD*; Nicolette Ras, BS; Thomas Sikorski, BS; Dessirae Romesha, BS; Andrea Bonicelli, PhD; Noemi Procopio, PhD*
10:30 am – 10:50 am	**I26**	**The Recovery of Vertebrate Scavenger DNA From Human Remains** Eliana Busch-Hebert, BA; Charity G. Owings, PhD*; Richard Gerhold, DVM
10:50 am – 11:10 am	**I27**	**Forensic Entomology Research in the United Kingdom: A Review of Scientific Contributions, Trends, and Future Directions** Jonathan J. Parrott, PhD*
11:10 am—1:00 pm		**BREAK**

Forensic Pathology I

Moderator: Sidartha Das, MD — Co-Moderator: Antonio Oliva, MD, PhD

2:00 pm – 2:20 pm	**I70**	**The Missing Evidence at Autopsy: A Systematic Review of 37 Fatal Kounis Syndrome Cases and a Three-Level Forensic Pathway** Natalia Sebastiani, MD*; Gianmarco Sirago, MD; Paolo Visci, MD; Susanna Sabato, MD; Giacomo Radogna, MD; Micaela Sardelli, MD; Davide Ferorelli, MD; Alessandro Dell'Erba, MD, PhD
2:20 pm – 2:40 pm	**I71**	**When the Sky Turns Fatal: Traumatic and Thermal Injuries in Aircraft Accidents** Francesca Ferrari, MD; Bianca Beltrame, MD*; Federica Attico, MD; Sofia Bodini, MD; Andrea Verzeletti, MD

2:40 pm – 3:00 pm	**I72**	**The Bias of the Banner: Retrospective Ethical and Forensic Analysis of Emergency Abandonment Driven by Preconceived Clinical Assumptions** Gabrielle Lee, BS*; Joseph A. Prahlow, MD; Kong Lee, MD
3:00 pm – 3:20 pm		**BREAK**
3:20 pm – 3:40 pm	**I73**	**Coronary Fungal Thrombosis: A Rare Histopathological Finding** Athina Tousia, MD*; Athanasia Aidonopoulou, MD; Dimitrios Vlachodimitropoulos, MD, PhD; Chara Spiliopoulou, MD, PhD; Emmanouil I. Sakelliadis, MD, PhD *(FSF Emerging Forensic Scientist Award Oral Presentation)*
3:40 pm – 4:00 pm	**I74**	**Fatal Exertional Hyperthermia in a Runner With an RYR1 Variant of Uncertain Significance: Exertional Heat Stroke Versus** Ruben D. Alberto Hiraldo, MD*; J. Keith Pinckard, MD, PhD; Lauren Edelman, MD; Vickie Willoughby, DO
4:00 pm – 4:20 pm	**I75**	**The Prevalence of Tuberculosis at Forensic Autopsies in South Korea from 2019 – 2023** KyungHong Lee, MS*; Jong-pil Park, MD, PhD

Multidisciplinary Session: Toxicology and Pathology/Biology

Moderator: Lara Labay, PhD — Co-Moderator: Ponni Arunkumar, MD

1:00 pm – 1:20 pm	**L48**	**When the Investigation Continues: Fatal Carbon Monoxide Poisoning Identified Through Evolving Scene Information in a Dual- Decedent Death Investigation** Olivia Gabriel, DO*; Nadia A. Granger, MD; Christine Yoo, MD; Robert J. Zerby, BS; Ana Ovalle, MSFS; Rebecca L. Hartman, PhD
1:20 pm – 1:35 pm	**L49**	**Killer Kratom: A Case Series on Kratom-Related Deaths From a Large Urban Medical Examiner's Office** Zeenat Mirza, MD*; Lorenzo Gitto, MD
1:35 pm – 1:55 pm	**I68**	**Deaths Due to Alcohol Use Disorder** Jacqueline L. Parai, MD*; Alberto Chighine, MD, PhD; Christopher Milroy, MD
1:55 pm – 2:10 pm	**L50**	**Peripheral Blood Cocaine Concentrations in Acute Cocaine Toxicity and Cocaine-Related Cardiac Deaths: An 11-Year Retrospective Study** Diane M. Moore, PhD*; Joseph H. Kahl, DFS; Nicholas J. Barna, MD; Benjamin Mathis, MD
2:10 pm – 2:25 pm	**L51**	**Benzodiazepine and Opioid Co-Exposure: From Population-Level Mortality Risk to Case-Specific Forensic Interpretation** Sri Naga Devi Harshitha Bandi, BSc*; Keir Davies, MSc; Nikolas P P. Lemos, PhD
2:25 pm – 2:45 pm	**I69**	**Uterine Rupture During Pregnancy in the Setting of Methamphetamine Use** Ariana Pape, MD*; Logan Ritter, MD; Sara Zydowicz, DO; Sterling J. McLaren, MD

PATHOLOGY/BIOLOGY

Thursday—Session II

Forensic Pathology II

Moderator: Simone Grassi, MD — Co-Moderator: Sterling, McLaren, MD

8:30 am – 8:50 am	**I14**	**Postmortem Computed Tomography (PMCT) Imaging Can Be More Than Shades of Gray: A Leicester, United Kingdom, Perspective** Frances Hollingbury, MBChB* Mike Biggs, MD
8:50 am – 9:10 am	**I76**	**Fatal Acute Dehydration and Starvation in a Toddler Following Maternal Drug Overdose: A Rare Forensic Autopsy Case and the Public Health Implications** John O. Agboola, MD*; Tatyana Zinger, DO; Kristinza W. Giese, MD
9:10 am – 9:30 am	**I77**	**Fatal Pediatric Injuries: A 13-Year Retrospective Review of Non-Natural Deaths in Miami-Dade County** Mariana Voudouri, MD*; Benjamin Mathis, MD; Nicholas J. Barna, MD; Alex Giachetti, PSM; Katherine L. Kenerson, MD
9:30 am – 9:50 am		**BREAK**
9:50 am – 10:10 am	**I78**	**Injury Pattern and Survival Time in Homicide Cases in Relation to the Weapon Type** Siddhartha Das, MD*; Naveen Alagarasu, MD; Jang Bahadur Prasad, PhD
10:10 am – 10:30 am	**I79**	**Maternal-Fetal Mortality in Pre-Eclampsia and Eclampsia: A Forensic Pathological Perspective** Larissa Ybanez, DO*; Hannah C. Jarvis, MRCS(Eng)
10:30 am – 10:50 am	**I80**	**Pediatric Bicycle-Related Trauma: A Four-Year Experience From an Italian Tertiary Pediatric Emergency Department** Giovanni Aulino, MD*; Luca Cerra, MD; Francesca Cittadini, MD, PhD
10:50 am – 11:10 am	**I81**	**Spinal Cord Contusion Confusion: A Clinically Occult Injury and Significant Contributing Factors in a Drowning Death** David Jumes, DO*; Charles T. Rohrer, MD
11:10 am—2:00 pm		**BREAK**

Postmortem Interval Estimation

Moderator: Noemi Procopio, PhD — Co-Moderator: Baneshwar Singh, PhD

2:00 pm – 2:20 pm	**I82**	**A Human Donor Study in a Semi-Aquatic Experimental Setting Integrating TADS and Protein-Based Analyses for PMI Estimation** Bianca Beltrame, MD*; Jane C. Harris, PhD; Beatrix Schoenegger, BSc; Julia Kinzl, BSc; Philip Treml, BSc; Andrea Verzeletti, MD; Stefan Pittner, PhD
2:20 pm – 2:40 pm	**I83**	**Improving Postmortem Interval Estimation Through Multivariate Vitreous Humor Biochemistry** Andrea Costantino, MD*; Beatrice Defraia, MD; Luisa Lanzilao, BS; Ilenia Bianchi, PhD; Vilma Pinchi, PhD; Martina Focardi, MD

2:40 pm – 3:00 pm	**I84**	**Seasonal Soil Microbial Succession From Surface-Deposited Pigs in South Africa: Toward Postmortem Interval and Post-Depositional Interval Estimation Development** Cherene de Bruyn, MA*; Victoria Gibbon, PhD; Devin A. Finaughty, PhD; Kirstin L. Snyckers, BSc; Heather Panter, PhD; Kirstie R. Scott, PhD; Komang Ralebitso-Senior, PhD
3:00 pm – 3:20 pm		**BREAK**
3:20 pm – 3:40 pm	**I85**	**Mapping a Siloed Science: A PRISMA Review of Temperature-Dependent Decomposition and Postmortem-Interval Estimation Across Forensic Sub-Disciplines** Emily Loughrin*; Hayden S. McKee-Zech, PhD
3:40 pm – 4:00 pm	**I86**	**The Challenges of PMI Estimation Through the Application of Semiquantitative Scoring Systems** Ilaria Fracassi, APM*; Antonietta Porzio, APM; Denise Gemmellaro, MD, PhD; Carlo Pietro Campobasso, APM
4:00 pm – 4:20 pm	**I87**	**Validating Microbiome-Based Postmortem Interval Models Via Partnership With the Medicolegal Community** Jessica Metcalf, PhD*; Valerie Seitz, PhD; Rob Knight, PhD; Sibyl Bucheli, PhD; David Carter, PhD

Thursday—Session III

Jay Dix Memorial Lecture Series—Morning Session

Moderator: James R. Gill, MD

Co-Moderator: Alberto Chighine, MD, PhD

8:30 am – 8:40 am	**I88**	**Introduction** James R. Gill, MD
8:40 am –9:30 am	**I88**	**Firearms Injuries** Andrew M. Baker, MD
9:30 am –9:45 am		**BREAK**
9:45 am – 10:35 am	**I88**	**Forensic Neuropathology** Cassie B. MacRae, MD
10:35 am –11:25 am	**I88**	**Fatal Sport Trauma** Katherine Maloney, MD
11:25 am –2:00 pm		**BREAK**

Jay Dix Memorial Lecture Series—Afternoon Session

Moderator: Ilaria Tarozzi, MD

Co-Moderator: Gregory Schmunk, MD

2:00 pm –2:50 pm	**I88**	**Neglect (and Abuse) of Vulnerable Persons** Susan Ely, MD
2:50 pm –3:05 pm		**BREAK**
3:05 pm –3:55 pm	**I88**	**Sharp Foprce Trauma** Jan M. Gorniak, DO
3:55 pm –4:45 pm	**I88**	**Testifying in Court** James R. Gill, MD

*Presenting Author

PATHOLOGY/BIOLOGY

Friday

Poster Session

11:30 am – 1:00 pm	I**95**	**Plastic Bag Suffocation: A Narrative Review, a 13-Year Institutional Case Series, and a Proposed Ten-Step Postmortem Protocol** Roberta Bibbò, MD*; Pollice Giovanni, MD*; Nasrin Aktar, PhD*; Luigi Cipolloni, PhD; Stefania De Simone, PhD; Benedetta Baldari, PhD
11:30 am – 1:00 pm	**I96**	**Poorly Differentiated Gastrointestinal Carcinoma: A Rare Cause of Death in Childbearing-Age Women with Elevated Beta-hCG** Christopher Kreag Poulos, MD; Xin Zhang, MD*
11:30 am – 1:00 pm	**I97**	**Postmortem Computed Tomography (PMCT) in Water-Related Fatalities: Differentiating Fatal Drowning From Deaths Occurring in Water** Vittorio Gatto, MD, PhD; Elena de Laurentiis, MD*; Raffaele Cirillo, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Carmen Sementa, MD; Vittorio Fineschi, MD, PhD; Alessandro Santurro, MD, PhD*
11:30 am – 1:00 pm	**I98**	**Postmortem Freeze-Thaw Cycles Observed Through Histological Analysis of Human Intercostal Muscles** Melissa Dwello, MS*; Amanda L. Joslyn, MS; Jane C. Harris, PhD
11:30 am – 1:00 pm	**I99**	**Quadricuspid Pulmonic Valve, An Incidental Autopsy Finding: A Series of Three Cases** Riley Davis, BA*; Christine James, DO; Victoria Roby, MS; Joseph Russell; Amanda O. Fisher-Hubbard, MD*
11:30 am – 1:00 pm	**I100**	**Regional Variation in Mammalian Scavenger Guilds at Two Human Decomposition Facilities: Implications for Taphonomy and Cross-Facility Standardization** Kate M. Rauchbauer, BS*; Hayden S. McKee-Zech, PhD; Emma Gariepy, BS; Erin A. Patrick, MSc
11:30 am – 1:00 pm	**I101**	**Space Forensic Traumatology: A Proposal of a Novel Medicolegal Classification for Traumatic Injuries During Human Space Exploration** Matteo Antonio Sacco, MD, PhD*; Saverio Gualtieri, MD, PhD*; Maria Cristina Verrina, MD; Mattia Solano, MD*; Gioele Grimaldi, MD*; Roberto Raffaele, MSc*; Federica Riillo, MD*; Isabella Aquila, MD, PhD*
11:30 am – 1:00 pm	**I102**	**Survival Beyond 30 Minutes of Homicidal Ligature Strangulation: Novel Insights Into the Pathophysiology of Ligature Asphyxiation** Martin Janík, MD, PhD*; Petr Hejna, MD, PhD; Richard Sivulič, MD, PhD*; Katarína Hanzelyová, MCS; Veronika Rybárová, MD, PhD; Ľubomír Straka, MD, PhD
11:30 am – 1:00 pm	**I103**	**The Applications of Artificial Intelligence in the Forensic Reconstruction of Fall-Related Trauma: A Comparison Between Single and Simultaneous Multiple Falls** Isabella Aquila, MD, PhD*; Saverio Gualtieri, MD, PhD*; Maria Cristina Verrina, MD; Mattia Solano, MD*; Maria Daniela Monterossi, MD*; Valerio Riccardo Aquila, MSc; Roberto Raffaele, MSc*; Federica Riillo, MD*; Pietro Tarzia, MD*; Alessandro Di Cello; Matteo Antonio Sacco, MD, PhD*
11:30 am – 1:00 pm	**I104**	**The Development of an Improved Method for Recovery of Touch DNA From Metal Surfaces** Caitlyn Amos, MSc*; Herve Menard, PhD; Alexander Gray, PhD; Niamh Nic Daeid, PhD

PATHOLOGY/BIOLOGY

11:30 am – 1:00 pm	**I105**	**The Diagnostic Yield of Postmortem Genetic Testing in Medicolegal Sudden Unexpected Death: A Systematic Review and Meta-Analysis With Independent Verification of Reported Variant Counts** Gianmarco Sirago, MD*; Giacomo Radogna, MD; Micaela Sardelli, MD; Natalia Sebastiani, MD; Paolo Visci, MD; Susanna Sabato, MD; Biagio Solarino, MD, PhD; Davide Ferorelli, MD; Alessandro Dell'Erba, MD, PhD
11:30 am – 1:00 pm	**I106**	**The Expansion of Harm Reduction and Post-COVID Opioid Overdose Mortality: A Three-Segment Interrupted Time Series Analysis of Opioid Overdose Deaths in Jefferson County, Alabama** George Alford, BS*; Brandi C. McCleskey, MD
11:30 am – 1:00 pm	**I107**	**The Geographical Distribution and Habitat Preferences of Forensically Relevant Diptera in Finnish Landscapes: A Study on Calliphoridae and Sarcophagidae** Laura Maria Pegna, MD*; Jiri Vihavainen, MSc; Danilo Fabrizio Santoro, MD, PhD; Valeria Maselli, MD, PhD; Denise Gemmellaro, MD, PhD; Jaakko Pohjoismäki, PhD
11:30 am – 1:00 pm	**I108**	**The Missing Projectile: A Diagnostic Autopsy and Postmortem CT Findings in Two Captive-Bolt Gun Homicides** Greta Cena, MD*; Francesco Cattaneo, MD; Silvia Boca, MD; Luana Bonaccurso, MD; Edoardo Toffano, MD; Caterina Petetta, MD; Niccolo' D. Melloni, MD*; Roberto Testi, MD
11:30 am – 1:00 pm	**I109**	**The Protection Paradox: When a Safety Helmet Mimics Sharp-Force Injury in Fatal Blunt Head Trauma** Susanna Sabato, MD*; Giacomo Radogna, MD; Micaela Sardelli, MD; Gianmarco Sirago, MD; Natalia Sebastiani, MD; Paolo Visci, MD; Davide Ferorelli, MD; Alessandro Dell'Erba, MD, PhD
11:30 am – 1:00 pm	**I110**	**Two Bodies, One Scene: Homicide-Suicide or Suicide Pact?** Silvia Boca, MD*; Niccolo D. Melloni, MD*; Edoardo Toffano, MD; Caterina Petetta, MD; Greta Cena, MD; Luana Bonaccurso, MD; Fabrizio Magliano, DPS; Roberto Testi, MD
11:30 am – 1:00 pm	**I111**	**Understanding Femicide in Jefferson County, Alabama: Demographic Patterns and Homicide Characteristics** Lilian G. Kilgore, BS*; Brandi C. McCleskey, MD
11:30 am – 1:00 pm	**I112**	**Unexpected Death Due to Snake Envenomation: A Forensic Autopsy Case Report** Christina Vu, PSM*; Rebecca Graziano, MD
11:30 am – 1:00 pm	**I113**	**A Vitality Assessment in Charred Bodies and Human Remains: Integrating Carboxyhemoglobin, Toxicology, Histopathology, and Postmortem Imaging** Gabriele Casaburi, MD; Maria Chiara David, PhD; Angela Simonelli, PhD; Alfonso Acerra, DMD; Elena de Laurentiis, MD*; Raffaele Cirillo, MD*; Federico Battipaglia, MD*; Roberto Raimo, MD*; Francesca Consalvo, MD*; Vittorio Fineschi, MD, PhD; Alessandro Santurro, MD, PhD*
11:30 am – 1:00 pm	**I114**	**Waving Through a Window: A Case of Mechanical vs. Positional Asphyxiation** Claire Allison, MS*; Kylie Lopez, BS; Amber S. Silva, MHS; Wendy M. Gunther, MD
11:30 am – 1:00 pm	**I115**	**When Autopsy Is Not Enough: A Multidisciplinary Reconstruction of a Fatal Broadhead Arrow Injury** Isabella Caristo, MD*; Ilaria Grasso, MD; Sara Lo Pinto, MD; Francesco Ventura, MD

11:30 am – 1:00 pm	**I116**	**When Silence Falls in Space: The Space Forensic Death Investigation Protocol (SFDIP)—A Forensic Pathology Protocol for the Medicolegal Investigation of Deaths During Long-Duration Space Missions** Saverio Gualtieri, MD, PhD*; Matteo Antonio Sacco, MD, PhD*; Maria Cristina Verrina, MD; Mattia Solano, MD*; Maria Daniela Monterossi, MD*; Gioele Grimaldi, MD*; Roberto Raffaele, MSc*; Federica Riillo, MD*; Isabella Aquila, MD, PhD*
11:30 am – 1:00 pm	**I117**	**When Witnesses Agree But the Injuries Do Not: Limits of Primary-Impact Reconstruction in Fatal Workplace Trauma** Andrea Scatena, MD; Pietro Ciulli, MD; Rebecca Maggi, MD*; Sara Giacomelli, MD; Giovanni Pollice, MD; Roberta Bibbò, MD; Naomi Iacoponi, MD; Marco Di Paolo, MD
11:30 am – 1:00 pm	**I118**	**Wischnewski Spots and Ethylene Glycol Fatal Poisoning: A Case Report** Gaetano Di Donna, MD*; Emanuele Capasso, PhD; Roberto Cortese, MD; Massimo Niola, PhD
11:30 am – 1:00 pm	**I119**	**Work-Related Deaths in Luxembourg: A Retrospective Analysis of a Six-Year Period (2019 – 2024)** Thorsten Schwark, MD, PhD*; Martine Schaul, MD

Friday—Session I

Improving Methods in Pathology/Biology

Moderator: Jacqueline Parai, MD Co-Moderator: Duarte Nuno Vieira, MD, MSc, PhD

8:50 am – 9:10 am	**I89**	**An Observation of a Tri-Lobed Left Lung In Medicolegal Autopsy: A Case Report on Anatomic Variation** Nicole Wicmandy, MS*; Janice Diaz Cavalliery, MD
9:10 am – 9:30 am	**I90**	**Around the World and Beyond: Advancing Medicolegal Death Investigation Through Standards** Kelly Keyes, BS*
9:30 am – 9:50 am	**I91**	**Artificial Intelligence Applications for Medical Examiner Operations** Paul S. Uribe, MD*
9:50 am – 10:10 am		**BREAK**
10:10 am – 10:30 am	**I92**	**Deep Learning for Injury Classification in Forensic Investigation** Uzma Zaheen Anwar, MPhil*
10:30 am – 10:50 am	**I93**	**Raman Microscopy for the Characterization of Traumatic Brain Injury: The Impact of Tissue Preparation on Spectral Quality** Gaia De Angelis, MD*; Biancamaria Treves, MD; Alessandro Ghamlouch, MD; Maura Racciatti, MD; Filippo Alessandro Montalto, MD; Fabio Del Duca, MD, PhD; Gabriele Napoletano, MD, PhD
10:50 am – 11:10 am	**I94**	**When Autopsy Is Not Possible: The Integrated Space Death Diagnostic Algorithm (ISDDA): A Medicolegal Diagnostic Algorithm for Determining the Cause of Death During Long-Duration Space Missions** Saverio Gualtieri, MD, PhD*; Matteo Antonio Sacco, MD, PhD*; Maria Cristina Verrina, MD; Mattia Solano, MD*; Gioele Grimaldi, MD*; Roberto Raffaele, MSc*; Federica Riillo, MD*; Pietro Tarzia, MD*; Isabella Aquila, MD, PhD*
11:10 am—2:00 pm		**BREAK**

PATHOLOGY/BIOLOGY

Omics and BIomarkers

Moderator: Zachary Burcham — Co-Moderator: Michelle Jorden MD

2:00 pm – 2:20 pm	**I120**	**An Evaluation of Uterine and Liver Transcriptomes as Novel Sources of Postmortem Molecular Biomarkers** Christina Harris, BS*; Peyton Fleming, MSc; Silvia D. Visonà, PhD; Gulnaz T. Javan, PhD*
2:20 pm – 2:40 pm	**I121**	**Integrating Systemic Inflammatory Biomarkers and Pharmacological Profiles for Objective Assessment of Physical Violence Severity: A Retrospective Analysis** Mahmoud Ali, BS; Federica Collini, MD*
2:40 pm – 3:00 pm	**I122**	**Evaluating Pre-Analytical Variables for Microbiome-Based Bloodstain Time Since Deposition Estimation** Kylie Blackwell, BS*; Lauren Cassidy, BS*; Lauren Y. Knight, MFS; Nishita Mehtalia, MFS; Ya-Chih (Jessica) Cheng, PhD
3:00 pm – 3:20 pm		**BREAK**
3:20 pm – 3:40 pm	**I123**	**A Comparison of Serum Lipid Levels Between Suicidal and Non-Suicidal Deaths to Help Understand the Manner of Death** Siddhartha Das, MD*; Karpora Sundara Pandyen, MBBS; Vinod Ashok Chaudhari, MD; Prashant Shankarrao Adole, MD; Harichandrakumar Kottyen Thazhath, PhD
3:40 pm – 4:00 pm	**I124**	**Tiny Traces, Big Impact II: The Persistence and Transfer of Human Fingertip Microbiomes for Forensic Identification** Michele Di Nunzio, PhD*; Nengi Ogbanga, PhD; Komang Ralebitso-Senior, PhD; Anna Franzoni, MS; Subham Mukherjee, PhD; Domiziana Buffoni, MSc; Andy Nixon, MA; Sarah Gino, MD, PhD; Simona Francese, PhD; Noemi Procopio, PhD
4:00 pm – 4:20 pm	**I125**	**Time-Resolved Neuronal Death After Traumatic Brain Injury Revealed by Single-Cell Transcriptomics: The Implications for Forensic Molecular Pathology** Qiuyun Yang, MD*; Weibo Liang, MD; Xiameng Chen, MD; Shengqiu Qu, MD; Lin Zhang, MD

Friday—Session II

Virtopsy

Moderator: Paul Uribe, MD — Co-Moderator: Carlo Campobasso MD, PhD

8:50 am – 9:10 am	**I126**	**A Quantitative Postmortem CT Assessment of Firearm Wound Tracks: A Multicenter Radiomic-Morphometric Framework for Forensic Ballistic Imaging** Luca Marinelli, PhD*; Vittorio Patanè, MD; Nicola Maria Tarantino, MD; Nicoletta Giordano, MD; Anna Russo, MD; Valerio Nardone, MD, PhD; Alfonso Reginelli, MD, PhD; Salvatore Cappabianca, MD, PhD
9:10 am – 9:30 am	**I127**	**From Global Consensus to Local Casework: Applying International PMCT Guidelines in Death Investigation** Jamie M. Elifritz, MD*

*Presenting Author

9:30 am – 9:50 am	**I128**	**Reading the Fractures: Postmortem Computed Tomography in Hammer-Related Homicidal Overkilling** Alessia Brandimarti, MD*; Matteo Moretti, MD, PhD; Luisa Andrello, MD, PhD; Elia Mafrin, MD; Giulia Riva, MD; Rosa Maria Martinez, MD
9:50 am – 10:10 am		**BREAK**
10:10 am – 10:30 am	**I129**	**Practical Applications of 3D Scanning in Forensic Pathology** Carl J. Schmidt, MD*; Caroline Durham, MD
10:30 am – 10:50 am	**I130**	**Targeted Postmortem MRI After Whole-Body CT: Optimizing a Multidisciplinary Forensic Imaging Workflow** Mauro Midiri, MD*; Giuseppe Lo Re, MD, PhD; Ginevra Malta, MD, PhD; Giuseppe Davide Albano, MD; Simona Pellerito, MD; Marco Piraino, MD; Maria Puntarello, MD; Tommaso D'Anna, MD; Stefania Zerbo, MD, PhD; Antonina Argo, MD, PhD
10:50 am – 11:10 am	**I131**	**The Use of Micro-CT in Cases of Criminal Dismemberment of a Human Body Following Homicide** Sofia Goia, PhD*; Charlotte Primeau, PhD; Mark A. Williams, PhD
11:10 am—2:00 pm		**BREAK**

Afternoon Session

Moderator: Hannah Jarvis, MRCS — Co-Moderator: Andrea Costantino MD

2:00 pm – 2:20 pm	**I132**	**Fatal Complications of Elective Cosmetic Surgery: A Six-Case Series From Miami-Dade County** Mariana Voudouri, MD*; Nicholas J. Barna, MD; Benjamin Mathis, MD; Katherine L. Kenerson, MD
2:20 pm – 2:40 pm	**I133**	**Beyond Traditional Disasters: Adapting Disaster Victim Identification (DVI) Principles for Urban Mass Fatality Events—The Experience of the Rio de Janeiro Medico-Legal Institute (IMLAP), Brazil** Anne Katy Fares, MD*; Alfredo Maio, MD*; Paula Mota, MSc; C A. Simões, MD; Camila Cheble, MD; Renata Lopes de Oliveira, MD; Luciana Pires, MD
2:40 pm – 3:00 pm	**I134**	**A Rare Cause of Sudden Death: Fatal Splenic Sequestration Crisis in Hemoglobin SC Disease** Yvonne O'Toole, MBBch*; Benjamin J. Soriano, MD; Lorenzo Gitto, MD
3:00 pm – 3:20 pm		**BREAK**
3:20 pm – 3:40 pm	**I135**	**Beyond the Manner of Death: Are We Asking the Right Questions in Female Suicide Investigation? Looking Beyond Female Suicide** Chiara Carsana, MD*; Stefano Tambuzzi, MD, PhD*; Cristina Cattaneo, MD, PhD
3:40 pm – 4:00 pm	**I136**	**Comparing Likelihood Ratios From an Alternative Approach to Those From a Collaborative Disaster Victim Identification Exercise** Claire L. Mercer, PhD*
4:00 pm – 4:20 pm	**I137**	**Engine Capacity as a Determinant of Fatal Injury Patterns in Two-Wheeler Road Traffic Fatalities: A Three-Year Autopsy-Based Study** Ambika Prasad P. Patra, MD*; Surendar Sachin, MBBS

PATHOLOGY/BIOLOGY

Multidisciplinary Session: Pathology/Biology and Toxicology

The 27th Annual Joint Session on Pediatric Postmortem Forensic Toxicology

Moderator: Nikolas Lemos, PhD

Co-Moderator: Timothy Rohrig, PhD

1:00 pm – 3:00 pm **L74** **Children Are Not Small Adults**
Nikolas P. Lemos, PhD*; Timothy P P. Rohrig, PhD*; Stuart A.K. Kurtz, MS*; Laureen J. Marinetti, PhD*; Joseph J. Saady, PhD*; Vincent Tranchida, MD*