Wednesday

Poster Session		
7:30 PM – 9:00 PM	L1	Comparing the Performance of LC-QqQ-MS vs. LC-QTOF-MS for Targeted Analysis of NPS With a Test Mixture of 40 NPS and Metabolites in Whole Blood, Urine, and Oral Fluid Rebecca L. Smith, MS*; Anthony P. DeCaprio, PhD (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L2	4-Substituted AH-7921 Analogs: Isomer Selection During Synthesis and Pharmacological Profile John L. Krstenansky, PhD, MBA*
7:30 PM – 9:00 PM	L3	A Rare Case of Fatal Levamisole Toxicity Mark E. Shelly, DO*; Robert Johnson, PhD; Aria McCall, BS; Vanessa Lopez-Campos, BS
7:30 PM – 9:00 PM	L4	A Mass Disaster Caused by Gas Leaks: A Case Report and a Forensic Workflow Proposal Massimiliano Esposito, MD*; Federica Ministeri, MD; Salvatore Roccuzzo, MD; Nunziata Barbera, MD; Fabrizio Vanaria (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L5	Postmortem Redistribution in Forensic Toxicological Investigations Pietro Zuccarello, PhD*; Monica Salerno, MD; Massimiliano Esposito, MD; Francesco Sessa, MS, PhD; Nunziata Barbera, MD
7:30 PM – 9:00 PM	L6	My Way: A Case of Lethal Intoxication of an Animal Euthansia Drug in a Veterinary Doctor Gianluca Musci, MD; Alessandra Petruzzellis, MD; Gianluca Gravili, MD; Giorgio De Donno, MD; Stefania Galizia, MD*; Gianfrancesco Di Nunno, MD; Antonio De Donno, MD
7:30 PM – 9:00 PM	L7	A Ten-Year (2013–2022) Retrospective Analysis of Road Traffic Deaths in the Northern Italian Region of Campania Anna Carfora, PhD; Alessandro Feola, MD, PhD*; Raffaella Petrella, PhD; Giusy Ambrosio, MD; Stefano Festinese, MD; Ilaria Fracassi, MD; Paolo Palermo, MD; Martina Zampone, MD; Carlo Pietro Campobasso, MD, PhD
7:30 PM – 9:00 PM	L8	Trends in Neonatal Deaths From Fentanyl Emily Fenton, MBA, MSFS*; Kari M. Midthun, PhD; Brianna Peterson, PhD
7:30 PM – 9:00 PM	L9	WITHDRAWN
7:30 PM – 9:00 PM	L10	A Complete Review of Propofol Misuse in the Health Care System and as a Drug of Abuse Jidabha Apiluk, BS; Sajeel Shah, PhD*; Nikolas P. Lemos, PhD
7:30 PM – 9:00 PM	L11	A Retrospective Analysis of Results From United States Court-Ordered Mandatory Drug Testing of Oral Fluid and Hair and the Impacts of Expanding the Testing Scope for Fentanyl and Fentanyl-Related Compounds Jeri D. Ropero-Miller, PhD*; Megan Grabenauer, PhD; Nichole D. Bynum, MS; Nicolas Richardson, PhD
7:30 PM – 9:00 PM	L12	Drops of Insanity? Tropicamide Recreational Usage: Early Warning Alarms in Forensic Science Sushil Bhatt, PGDST*; Jagmahender Singh Sehrawat, PhD; Vishali Gupta, MS (FSF Emerging Forensic Scientist Award Poster Presentation)

7:30 PM – 9:00 PM	L13	Biofluid Sampler: A Promising Sampling and Sample Preparation Platform for Forensic Toxicological Investigations
7:30 PM – 9:00 PM	L14	Abuzar Kabir, PhD*; Marcello Locatelli, PhD; Kenneth G. Furton, PhD Quantitation of Delta-8-Tetrahydrocannabinol in Postmortem Specimens by the Method of Standard Addition
		Robert M. Lockwood, PhD*; Taikeria Adams, BS; Curt E. Harper, PhD
7:30 PM – 9:00 PM	L15	Fabric Phase Sorptive Extraction: A Green Sample Preparation Strategy for Forensic Toxicology Abuzar Kabir, PhD; Kenneth G. Furton, PhD*; Marcello Locatelli, PhD
7:30 PM – 9:00 PM	L16	A Comparative Analysis of Accuracy, Precision, and LOD in AAS and TMA for the Quantification of Cadmium in the Blood Samples
		Jatin Kumar Drall, BTech*; Ajay Kumar Kataria, MTech
7:30 PM – 9:00 PM	L17	The Determination of Cadmium in Blood by Voltammetry Using Hanging Mercury Drop Electrode (HMDE) Ashok Kumar Jaiswal, PhD*
7:30 PM – 9:00 PM	L18	Identifying Designer Benzodiazepines in Blood Using Gas Chromatography/Mass
		Spectrometry Devin Baer*; Michael T. Truver, PhD; Sara C. Brogan, BS; Jennifer L. Hoyer, MS; Michele Crosby; Chris W. Chronister, PhD
7:30 PM – 9:00 PM	L19	The Impact of Gold Top SST (Gel and Clot) Collection Tubes on Cannabinoid Quantitative
		Analysis in Blood Bridget O'Leary, MS; Marta Concheiro-Guisan, PhD*
7:30 PM – 9:00 PM	L20	Designer Benzodiazepine ELISA Cross-Reactivity
		Leonela M. Placencia, BS*; Nicholas B. Tiscione, MS (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L21	EC-SERS and DART®-TOF/MS for Toxicological Screening Colby E. Ott, PhD*; Edward Sisco, PhD
7:30 PM – 9:00 PM	L22	A Validated Method for Quantification of Buprenorphine/Naloxone and Its Primary Metabolites in Clinical Human Breast Milk, Maternal and Infant Plasma Samples Using Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) Munchelou M. Gomonit, BS*; Krystle McConnell, BA, MPH; Lauren M. Jansson, MD; Madeleine J. Swortwood, PhD
7:30 PM – 9:00 PM	L23	An Evaluation and Comparison of the Evidence MultiSTAT to GC/MS for the Detection of Morphine, Codeine, and Thebaine in Urine and Oral Fluid Amanda L. Pacana, BS, MSFS*; Britni Skillman, PhD; Madeleine J. Swortwood, PhD; Stacie Terry, MSFS
7:30 PM – 9:00 PM	L24	An Investigation of Phthalate Levels in Teething Devices for Children in the United Arab Emirates Vipula Aravamudhan*; Nrashant Singh; Deveshi Kachroo; Noora Najeeb
7:30 PM – 9:00 PM	L25	The Validation of an LC/QqQ/MS Method for the Detection of Single Doses of Drugs in Hair Kaylyn Ann Keith*; Anthony P. DeCaprio, PhD

7:30 PM – 9:00 PM	L26	The Development of a Reference Material for Chemical Hair Analysis Kaitlyn Bonilla, BS*; Charlene Harris, BS; Chloe Phillips; Matthieu Baudelet, PhD (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L27	Streamlining Blood LC/MS/MS Workflows to Meet ASB/OSAC Recommendations for Medicolegal Death and Impaired Driving Cases Jason Truskowski, BS*
7:30 PM – 9:00 PM	L28	Streamlining Urine LC/MS/MS Workflows to Meet ASB/OSAC Recommendations for Drug-Facilitated Crime Investigations Jason Truskowski, BS*
7:30 PM – 9:00 PM	L29	"Hang on a Minute": Developing Improved Separation Methodologies for Weakly Retained Polar Molecules in LC/MS/MS Briana Rose Alarcon, BS*; William H. Campbell, PhD (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L30	The Separation of Fentanyl Analog Geometric and Positional Isomers by LC/MS/MS Erika L. Sitch, MPS*; Briana Rose Alarcon, BS*; William H. Campbell, PhD
7:30 PM – 9:00 PM	L31	What Are You Smoking? A Derivatization to Improve the Analysis of Tetrahydrocannabinol (THC) Isomers Via LC/MS/MS Olesia Leonna Headen*; William H. Campbell, PhD (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L32	The Quantitation of 106 Drugs in Urine Using a High-Throughput, Seven-Minute Method by High Resolution Mass Spectrometry and Triple Quadrupole Courtney Patterson*; Mark Tracy; Kristine van Natta; Stephanie Samra; Kerry Hassell (FSF Emerging Forensic Scientist Award Poster Presentation)
7:30 PM – 9:00 PM	L33	Urine Immunoassay Cross-Reactivity of Various OTC and Prescription Drugs Fatima Chavez-Esparza, BS*; Courtney Sellens, MS, BS; Qiyang Zhang, PhD; Melissa M. Bailey, MSFS, PhD; Timothy P. Rohrig, PhD; Connor DeJesus, MS, BS
7:30 PM – 9:00 PM	L34	Don't Huff Before You Blow! Genevieve Huppe, MSc*; Julie Motard, MSc; Cynthia Roy, MSc; Anthony Gelinas, BSc; Pascal Mireault, MSc
7:30 PM – 9:00 PM	L35	Evaluating Drug Positivity Trends in Fatally Injured Drivers, Passengers, and Pedestrians in Connecticut Amanda L.A. Mohr, MS*; Grace Cieri, BS; James R. Gill, MD; Barry K. Logan, PhD
7:30 PM – 9:00 PM	L36	Drivers Under the Influence of Alcohol and Drugs: A Six-Year (2017–2022) Retrospective Analysis in a Southern Italian Region Anna Carfora, PhD; Alessandro Feola, MD, PhD*; Raffaella Petrella, PhD; Giusy Ambrosio, MD; Ilaria Fracassi, MD; Paolo Palermo, MD; Martina Zampone, MD; Carlo Pietro Campobasso, MD, PhD
7:30 PM – 9:00 PM	L37	Pediatric Poisoning: A Plan of Action for Early Diagnosis and Treatment Pascale Basilicata; Mariagrazia Marisei, MD; Rossella Guadagni; Angela Simonelli; Gaetano Di Donna, MD; Anita Sammarco, MD; Massimo Niola, PhD; Maria Pieri*
7:30 PM – 9:00 PM	L38	The Effects of Ethanol on GABA Catabolism Via GABA-Transaminase Mary Corrigan*; Robert H. Powers, PhD

7:30 PM – 9:00 PM	L39	Crotalus Snake Venoms of North and South America: Their Symptoms, Treatments, and Potential Medical Applications Victoria Hudson, MSc*; Sajeel Shah, PhD, MS; Nikolas P. Lemos, PhD
7:30 PM – 9:00 PM	L40	A Review of Popular Illegal Performance-Enhancing Drugs in Sports and Gyms Rami Abbas, BS*; Sajeel Shah, PhD, MS; Nikolas P. Lemos, PhD
7:30 PM – 9:00 PM	L41	An Evaluation of Long-Term Health Effects From Acute Exposure to Toxic Chemicals Theresa Pennington*
7:30 PM – 9:00 PM	L42	Future Strategies in Drug Trend Monitoring and Harm Reduction Agnieszka Urban, BSc*; Geraldine Dowling, PhD, MSc; Sajeel Shah, PhD, MS; Nikolas P. Lemos, PhD
7:30 PM – 9:00 PM	L43	A Review of Factors Affecting the Interpretability of Postmortem Cannabinoid Concentrations and Their Limitations Sherri L. Kacinko, PhD; Daniel S. Isenschmid, PhD; Barry K. Logan, PhD*

Thursday

Annual Lectureship in Toxicology

Moderator: Dayong Lee, PhD		Co-Moderator: Erin Karschner, PhD
8:30 AM – 9:45 AM	L45	Annual Lectureship in Toxicology Brandon Jeffery, MS*
9:45 AM – 10:15 AM	L46	An Update on Standards Development Activities in Forensic Toxicology Marc A. LeBeau, PhD*
10:15 AM – 10:30 AM		BREAK

Novel Psychoactive Substances

Moderator: Svante Viki	ngsson, P	PhD Co-Moderator: Elisa Shoff, MS
10:30 AM – 10:45 AM	L47	Quantitation of Hexahydrocannabinol and Metabolites in Blood From Recreational Users Robert Kronstrand, PhD*; Markus Roman; Henrik Gréen; Michael T. Truver, PhD
10:45 AM – 11:00 AM	L48	Determining Delta 9-THC Acetate Analog Metabolites Using Human Liver Microsomes to Determine the Structure and Rate of Metabolism Natalie Ortiz, BS*; Justin L. Poklis, BS; Kimberly Karin, MS; Grace R.R. Williams, PhD; Carl E. Wolf, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)
11:00 AM – 11:15 AM	L49	The Metabolism of THC-O-Acetate (THCO)—An Emerging Drug Threat Ya-Chih (Jessica) Cheng, MS*; Charles R. Perkins, MS, BS; Sarah Kerrigan, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)

11:15 AM – 11:30 AM	L50	A Quantitative Confirmation Assay of New and Emerging Synthetic Cannabinoids by LC/QqQ/MS Haley Lynn Bibey, BS*; Sara Walton, MS; Heather L. Harris, MFS, JD; Alex J. Krotulski, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)
11:30 AM – 11:45 AM	L51	A Case Series Involving the Synthetic Cathinone Alpha-PiHP in Postmortem Forensic Investigations Sara Walton, MS*; Donna M. Papsun, MS; Michael E. Lamb, MSFS, BS; Alex J. Krotulski, PhD; Simon Elliott, BSc, PhD; Kerry Taylor, BSc; Michael T. Truver, PhD; Barry K. Logan, PhD
11:45 AM - 1:00 PM		BREAK

Multidisciplinary Session: Pathology/Biology and Toxicology

Moderator: Robert Johns	on, 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 (FSF Emerging Forensic Scientist Award Oral Presentation)
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, PhD*; Astrid Christiaens, MD; Kiki Van Langen, MD; Ingrid Bosman, PhD, MSFS (FSF Emerging Forensic Scientist Award Oral Presentation)
1:45 PM - 2:00 PM	L55	A Case Series of Suicides by Sodium Azide Ingestion: An Update Ingrid Bosman, PhD, MSFS*; Roelof Oosting, PharmD; Dick-Paul Kloos, PhD; Bart Ruiter; Jeroen Roosendaal, PhD; Kristof Maudens, PhD
2:00 PM - 2:15 PM	178	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, MD
2:15 PM - 2:30 PM	179	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
2:30 PM - 2:45 PM	180	Elevated Beta-Hydroxybutyrate Within a Pediatric Population and Its Associated Pathology: A Retrospective Case Series Nasim Haghandish, MDCM, PhD*; Chris Milroy, MD, LLB; Jacqueline Parai, MD; Anthea Lafreniere, MD
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
3:00 PM - 3:15 PM		BREAK

Drugs and Driving Special Session

Moderator: Marilyn Hu	estis, PhD	Co-Moderator: Curt Harper, PhD
3:15 PM – 3:30 PM	L56	Ketamine in Driving Under the Influence of Drugs (DUID) Cases: 2015–2023 Amanda L. D'Orazio, MS*; Ayako Chan-Hosokawa, MS
3:30 PM – 3:45 PM	L57	DUID Cannabinoid Investigations: Blood, Oral Fluid, or Urine—Which Is the Superior Specimen?
		Curt E. Harper, PhD*; Clarissa Lawen; Kristin Tidwell, BS; Gil Sapir, JD, MSc
3:45 PM – 4:00 PM	L58	The Detection of Cannabinoids in Exhaled Breath Condensate After Cannabis Use Jennifer L. Berry, PhD*; Kavita M. Jeerage, PhD; Cheryle N. Beuning, PhD; Ashley Brooks-Russell, PhD; Tara Lovestead, PhD
4:00 PM – 4:15 PM	L59	Cocaine and Benzoylecgonine in Blood and Oral Fluid of DUID Cases (2018–2022) Michael L. Weaver*; Clarissa Lawen; Christopher Bartle; Curt E. Harper, PhD
4:15 PM – 4:30 PM	L 60	Mile High: A Five-Year Review of Fentanyl Trends in Colorado Impaired Driving Cases Stephanie Olofson, BS, MS*
4:30 PM – 4:45 PM	L61	Impaired Driving Cases With Bromazolam Nicholas B. Tiscione, MS*; Edward Zumaeta

Friday

General Forensic Toxicology

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Moderator: Chris Hear	tsill, BSc	Co-Moderator: Aaron Shapiro, PhD	
8:30 AM – 8:45 AM	L62	An Outlook on Fentanyl Adulteration: Polydrug Circumstances, Trends, and Tomorrow's Forecast Alex J. Krotulski, PhD*; Sara Walton, MS; Donna M. Papsun, MS; Joshua S. DeBord, PhD; Barry K. Logan, PhD	
8:45 AM – 9:00 AM	L63	Controlled Oral Kratom Leaf Administration to Healthy Humans: Abuse Potential- and Withdrawal-Related Effects, Adverse Events, and Mitragynine and 7-Hydroxy-Mitragynine Plasma Pharmacokinetics Marilyn A. Huestis, MS, PhD*; John Bothmer, PhD; Thomas Hudzik, MS, PhD; Jack E. Henningfield, BA, PhD; Ramsey Atallah, BA	
9:00 AM – 9:15 AM	L64	The Extraction's Always Greener on the Other Side Madeleine E. Wood, MS*; Joshua Z. Seither, PhD; John J. Kristofic, BS; Erin Karschner, PhD; Jeffrey P. Walterscheid, PhD	
9:15 AM – 9:30 AM	L65	Homoamphetamine: A Cautionary Tale Laura Friederich, BS*; Sandra Bishop-Freeman, PhD	
9:30 AM – 9:45 AM	L66	The Bath Salts State: A Comprehensive Review of Substituted Cathinones in Miami From 2011 to 2023 Elisa N. Shoff, MS*; Zaney E. Mary, BS; Diane Moore, PhD	

9:45 AM – 10:00 AM	L67	The Search for the K-Hole: A Six-Year Study of Ketamine in Postmortem Cases From the Miami-Dade County Medical Examiner Department, 2018–2023 Jennifer Gonyea, BS*; Diane Moore, PhD
10:00 AM – 10:15 AM	L68	Segmented Workflows and the Confrontation Clause: Achieving Congruence Between Constitutional Guarantees, Laboratory Productivity, and Toxicological Expertise M.J. Menendez, JD*; Barry K. Logan, PhD; Daniel T. Anderson, MS; Donna M. Papsun, MS
10:15 AM – 10:30 AM		BREAK

Alternative Matrices

Moderator: Marta Cond	cheiro-Gu	uisan, PhD Co-Moderator: F. Wayne Lewallen, BS
10:30 AM – 10:45 AM	L69	A Quantitative Analysis of Cannabis Exposure Biomarkers in Exhaled Breath Condensate and Oral Fluid Meena Swaminathan, MSFS*; Anthony P. DeCaprio, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)
10:45 AM – 11:00 AM	L70	The Use of Hair Analysis as a Potential Predictor of Tolerance in Decedents With High Fentanyl Concentrations in Fentanyl-Related Deaths: Preliminary Results Nicola Pigaiani, MD*; Marco Ballotari, PhD, MA; Brandi C. McCleskey, MD; Francesco Taus, PhD; Federica Bortolotti, MD, PhD; Rossella Gottardo, PhD; Gregory G. Davis, MD, MSPH; Karen S. Scott, PhD
11:00 AM – 11:15 AM	L71	A Quantitative Assessment of Five Hair Drug Testing Laboratories With a Commercial Hair Reference Material Edwin Dale Hart, BS*; Svante Vikingsson, PhD; Ruth E. Winecker, PhD; Eugene D. Hayes, PhD; Lisa S. Davis, MS; Ron Flegel, MS
11:15 PM – 11:30 AM	L72	The Gonadotoxic Effects of Tobacco Smoking on Human Seminal Fluid Nadeem-Ul-Hassan Khan*; Allah Rakha*; Rahat Abdul Rehman*; Shahid Nazir, PhD; Tahmina Rehman
11:30 AM – 11:45 AM	L73	The Identification of the New Synthetic Opioid N-Piperidinyl Etonitazene (Etonitazepipne) in Postmortem Alternative Matrices Erika Buratti, PhD*; Gianmario Mietti, PhD; Alice Cerioni, PhD; Marta Cippitelli, PhD; Rino Froldi, MSc; Mariano Cingolani, MD, MSc; Roberto Scendoni, PhD (FSF Emerging Forensic Scientist Award Oral Presentation)
11:45 AM - 1:00 PM		BREAK

23rd Annual Postmortem Pediatric Forensic Toxicology Session

Moderator: Robert Midd	lleburg, P	hD Co-Moderator: Nikolas P. Lemos, PhD
1:00 PM - 3:00 PM	L74	Postmortem Pediatric Forensic Toxicology Robert A. Middleberg, PhD*; Nikolas P. Lemos, PhD*; Katherine Kenerson, MD*; Andrew Baker, MD*; Sterling J. McLaren, MD*; Diane Moore, PhD*; Mary Zaney, BS*