

TOXICOLOGY

Wednesday

Poster Session

7:30 pm – 9:00 pm	L1	A Risk Assessment of Lead Exposure in Glass Industry Workers: Evaluating Occupational Toxicity <i>Nrashant Singh, PhD*</i>
7:30 pm – 9:00 pm	L2	An Alcohol Impairment Evaluation in Cases of Severe Injury <i>Maria Pieri, PhD*; Pascale Basilicata, PhD; Mariagrazia Marisei, MD; Angela Simonelli, PhD; Angela Silvestre, MD; Rossella Guadagni, PhD; Emanuele Capasso, MD, PhD; Massimo Niola, PhD</i>
7:30 pm – 9:00 pm	L3	Biofluid Sampler: A Green and Robust Sampling and Sample Preparation Platform for Forensic Toxicological Analysis <i>Abuzar Kabir, PhD*; Kenneth Furton, PhD</i>
7:30 pm – 9:00 pm	L4	Cannabis-Based Medicines and Driving: Current Legal Issues in Switzerland <i>Cristian Palmiere, MD*; Maria Pia Scarpelli, MD</i>
7:30 pm – 9:00 pm	L5	Cocaine and Aortic Dissection: The Need to Overcome the Underreporting Bias Mariagrazia Marisei, MD* <i>Pascale Basilicata, PhD; Antonio Lombardi, MD; Angela Simonelli, PhD; Angela Silvestre, MD; Rossella Guadagni, PhD; Massimo Niola, PhD; Maria Pieri, PhD</i> <i>(FSF Emerging Forensic Scientist Award Poster Presentation)</i>
7:30 pm – 9:00 pm	L6	Comparative Postmortem Blood Alcohol Concentrations in Cardiac and Peripheral Blood: A Case Series <i>Giulia Ricchezza, MS*; Erika Buratti, PhD; Alice Cerioni, PhD; Gianmario Mietti, PhD; Marta Cippitelli, PhD; Rino Froidi, MS; Mariano Cingolani, MD; Roberto Scendoni, MD, PhD</i>
7:30 pm – 9:00 pm	L7	Ethanol Stability Over Time in Blood Samples Undergoing Headspace Analysis <i>Ava La Lande*; M. Denise Gemmellaro, PhD</i>
7:30 pm – 9:00 pm	L8	Forensic “ToxAlcology”: Is It Really Over for the Forensic Human Community? <i>Maria Pieri, PhD*; Pascale Basilicata, PhD; Mariagrazia Marisei, MD; Angela Simonelli, PhD; Angela Silvestre, MD; Rossella Guadagni, PhD; Claudia Casella, PhD; Massimo Niola, PhD</i>
7:30 pm – 9:00 pm	L9	Leveraging Surveillance Data for the Analysis of Trends, Adulteration, and Novel Substances in the District of Columbia Needle Exchange Programs: A Four-Year Review <i>Snehal Parikh, BS*; William Kim, BS</i>
7:30 pm – 9:00 pm	L10	Mapping Mortality: A Decade’s Review of Drug Usage in Maryland (2014–2024) <i>Nicholas Boire, MD*; Stephanie Dean, MD; Rebecca Phipps, PhD</i>
7:30 pm – 9:00 pm	L11	Revolutionizing Anti-Doping and Sports Forensics: Comprehensive Screening of Nutritional Supplements for WADA-Banned Substances Using High Resolution Mass Spectrometry <i>Astha Pandey, PhD*; Anirudha Dixit, MS; Disha Kothari, PhD; Abhishek Trivedi, MS</i>
7:30 pm – 9:00 pm	L12	The Opioid Crisis in Pakistan and Toxicological Interpretation: A Case Report <i>Muhammad Chaudhary, MPhil*</i>
7:30 pm – 9:00 pm	L13	WITHDRAWN

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- 7:30 pm – 9:00 pm **L14** **The Underreporting of Psychoactive Adulterants of Illicit Drugs of Abuse in Toxicological Samples**
*Shayna Kasher, MSFS**
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 7:30 pm – 9:00 pm **L15** **A Comparison of Sample Preparation Techniques for the Analysis of Drugs of Abuse in Oral Fluids**
Jared Burkhardt; Samantha Herbick, MSFS*
- 7:30 pm – 9:00 pm **L16** **A Gas Chromatography/Mass Spectrometry Analysis of Tetrahydrozoline in Alcoholic Beverage Residue Related to Drug-Facilitated Sexual Assault**
Alyssa Hampton, BS; Ellen Mwenesongole, PhD*
- 7:30 pm – 9:00 pm **L17** **A Look at Nitazenes Our Lab Has Detected Across the Country From 2020 to 2024**
Stuart Kurtz, MS; Laureen Marinetti, PhD; Kevin Shanks, MS*
- 7:30 pm – 9:00 pm **L18** **A Ten-Year Retrospective Review of Death in Custody Toxicology Results From Jefferson County, Alabama**
Amy Theriault, DO; Karen Scott, PhD*
- 7:30 pm – 9:00 pm **L19** **Accidental Acute Intoxication With Gummies Containing Delta-8- Tetrahydrocannabinol**
Stjepan Brzica, MChem; Slavena Cukrov Bezbradica, PhD; Kristina Jurković, PhD; Martina Cvjetko Ljutić*
- 7:30 pm – 9:00 pm **L20** **An Assessment of Cross-Reactivity for Cannabinoids in Blood and Oral Fluid Using Enzyme Immunoassay Kits**
Sara Jablonski, MSFS; Curt Harper, PhD*
- 7:30 pm – 9:00 pm **L21** **An Evaluation of Enzyme-Linked Immunosorbent Assay (ELISA) Screening Kits for the Detection of Nitazene Analogs**
Amanda Pacana, MSFS; Britni Skillman, PhD*
- 7:30 pm – 9:00 pm **L22** **An Incident of Food Poisoning Attributed to Bongkreic Acid and a Forensic Examination of the Deceased in Taiwan**
*Chou Yihung, MS**
- 7:30 pm – 9:00 pm **L23** **Assessing the Stability of NPS Benzodiazepines in Blood, Urine, and Serum Using LC/QqQ/MS**
Savannah Baker, MS; Sara Walton, MS; Donna Papsun, MS; Alex Krotulski, PhD*
- 7:30 pm – 9:00 pm **L24** **Drug/Substance Toxicity-Related Deaths Examined at the West Tennessee Regional Forensic Center and Their Prescription Drug History: A Comparison of 2023 to 2013**
Madeleine Phan, BS; Ibrahim Ortanca, MD*
- 7:30 pm – 9:00 pm **L25** **Evaluating Extraction Parameters for the Detection of Chronic and Single-Dose Drug Exposure in Forensic Hair Analysis Using Design of Experiments**
Kaylyn Keith, BS; Anthony DeCaprio, PhD; Mariana Colome Pena*
- 7:30 pm – 9:00 pm **L26** **Evaluation of the Cross-Reactivity of 27 Parent and 26 Metabolite Tetrahydrocannabinol Analogs Using a Tetrahydrocannabinol Carboxylic Acid ELISA and HEIA Kit**
Taylor Yates, BS; Justin Poklis, BS; Alaina Holt, PhD; Ciena Bayard, BS; Michelle Peace, PhD; Stephen Raso, PhD*

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7:30 pm – 9:00 pm	L27	A Forensic Analysis of Environmental Fate and Biodegradation of Benzodiazepines in Synthetic Wastewater Using SPE-LC/MS <i>Ali Alawi, MS*</i>
7:30 pm – 9:00 pm	L28	Gabapentin Detection and Trends in Alabama Toxicology Cases (2017–2023) <i>Belicia Sutton, MSFS*;</i> <i>Curt Harper, PhD;</i> <i>Taylor Williams</i>
7:30 pm – 9:00 pm	L29	Improving Liquid Chromatography/Mass Spectrometry Sensitivity for Barbiturates <i>Ethan Khandaker, BA*;</i> <i>William Campbell, PhD</i>
7:30 pm – 9:00 pm	L30	Matrix-Matched Standards for Quantitative Elemental and Molecular Analysis of Hair in Forensic Toxicology <i>Kaitlyn Bonilla, MS*;</i> <i>Ashley Fox;</i> <i>Chloe Phillips, BS;</i> <i>Matthieu Baudelet, PhD</i> <i>(FSF Emerging Forensic Scientist Award Poster Presentation)</i>
7:30 pm – 9:00 pm	L31	Modification of a Liquid Chromatography/Tandem Mass Spectrometry Method Targeting Lysergic Acid Diethylamide and Its Primary Metabolite to Include Nine Analogs <i>Amy Patton, PhD*;</i> <i>Erin Karschner, PhD;</i> <i>Jeffrey Walterscheid, PhD;</i> <i>Jason Garcia, PhD</i>
7:30 pm – 9:00 pm	L32	Old vs. New: A Novel Approach to Blood Alcohol Analysis In the Modern Day Forensic Laboratory. <i>Timothy Fassette, MS*</i>
7:30 pm – 9:00 pm	L33	Profiling Heavy Metals in Kratom Powder Purchased in Southeastern Pennsylvania and Southern New Jersey <i>Xavia Pough*;</i> <i>Tom Gluodenis, PhD</i>
7:30 pm – 9:00 pm	L34	The Quantitation of an Oral Fluid Drug Panel, Including THC, Using High Resolution Accurate-Mass (HRAM) Orbitrap Mass Spectrometry <i>Courtney Patterson, MPS*;</i> <i>Kerry Hassell, PhD</i>
7:30 pm – 9:00 pm	L35	Rapid Development of Analytical Methods and Prediction of Retention Times for Inhalants of Abuse on GC Stationary Phases Using Web-Based Modeling Software <i>Jessi Collier, BS*;</i> <i>Whitney Dudek-Salisbury, MS</i>
7:30 pm – 9:00 pm	L36	The Detection and Quantitation of Alcohol in Packed Red Blood Cells <i>Jordan Keller, BS*;</i> <i>Connor Gailliot, BAS;</i> <i>Justin Poklis, BS;</i> <i>Carrol Nanco, MCLS;</i> <i>Carl Wolf, PhD;</i> <i>Grace Williams, PhD</i>
7:30 pm – 9:00 pm	L37	The Extraction, Isolation, and Analysis of Clonazepam From Blood Using the High-Performance Thin-Layer Chromatography (HPTLC) Technique in Different Solvent Systems <i>Sunil Sunil, MS*;</i> <i>A.K Jaiswal, PhD</i>
7:30 pm – 9:00 pm	L38	The Postmortem Distribution of the Synthetic Cathinone MDPHP in a Fatal Intoxication Case <i>Andrea Costantino, MD*;</i> <i>Emma Croce, MS*;</i> <i>Alexandra Dimitrova, RF*;</i> <i>Fabio Vaiano, PhD*;</i> <i>Ilenia Bianchi, PhD;</i> <i>Vilma Pinchi, PhD;</i> <i>Martina Focardi, MD</i>
7:30 pm – 9:00 pm	L39	The Validation of an Analytical Method for the Quantitation of Xylazine in Human Hair <i>Andre Sukta, MSFS*</i>

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Thursday

Annual Lectureship in Toxicology

Moderator: Erin Karschner, PhD

Co-Moderator: Svante Vikingsson, PhD

8:00 am – 8:15 am		Welcome & Introductions
8:15 am – 9:15 am		Invited Lectureship <i>Michael Baumann, PhD</i> <i>National Institute on Drug Abuse</i>
9:15 am – 9:45 am	L40	An Update on Standards Development Activities in Forensic Toxicology <i>Marc LeBeau, PhD*</i>
9:45 am – 10:00 am	L41	Smith vs. Arizona and Strategies to Support the Admissibility of Toxicology Testimony: Don't Stop Reading at Page 18 <i>M.J. Menendez, JD*</i> ; <i>Barry Logan, PhD*</i>
10:00 am – 10:15 am		BREAK

Postmortem Toxicology and Drug Adulteration

Moderator: Stephen Raso, PhD

Co-Moderator: Lauren Richards-Waugh, PhD

10:15 am – 10:30 am	L42	Beyond the Green Thumb—The Role of Technology in a Case of Suicide by Pesticide Poisoning <i>Luca Diani, MD*</i> ; <i>Giada Rovito, MD*</i> ; <i>Laura Camilla Gasparini, MD</i> ; <i>Irene Pradelle, MD</i> ; <i>Matilde Ruju, MD</i> ; <i>Donata Favretto, MS</i> ; <i>Negar Eftekhari, PhD</i> ; <i>Carmela Vaccaro, MS</i> ; <i>Matteo Marti, MS</i> ; <i>Margherita Neri, MD, PhD</i>
10:30 am – 10:45 am	L43	Comparisons of Blood, Vitreous Fluid, and Urine (When Available): Drug Screen Findings in Over 100 Cases <i>Laureen Marinetti, PhD*</i>
10:45 am – 11:00 am	L44	The Determination of Measurement Uncertainty of Non-Routine Measurements in Forensic Toxicological Casework <i>Ingrid Bosman, PhD*</i> ; <i>Dick-Paul Kloos, PhD</i> ; <i>Camille van Dijk, MS</i> ; <i>Ivo Alberink, PhD</i>
11:00 am – 11:15 am	L45	Evaluating the Pharmacokinetics of Xylazine in Humans: A Paired Forensic and Clinical Model <i>Alex Krotulski, PhD*</i> ; <i>Sara Walton, MS</i> ; <i>Brittany Chapman, BS</i> ; <i>Patricia Martinez, MD</i> ; <i>Aidan Hampson, PhD</i> ; <i>Jyothi Polackal, BS</i> ; <i>Deborah Olabisi, MD</i> ; <i>John Nguyen, BSN</i> ; <i>John Broach, MD</i> ; <i>Brianna Stang, MS</i> ; <i>Alyssa Reyes, MS</i> ; <i>Barry Logan, PhD</i>
11:15 am – 11:30 am	L46	Paired Toxicology Assays for the Quantitation of Medetomidine and the Differentiation of Dexmedetomidine and Levomedetomidine <i>Sara Walton, MS*</i> ; <i>Brianna Stang, MS</i> ; <i>Alex Krotulski, PhD</i> ; <i>Sherri Kacinko, PhD</i> ; <i>Barry Logan, PhD</i>
11:30 am – 1:00 pm		BREAK

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Multidisciplinary Session: Pathology/Biology and Toxicology

Moderator: Gregory Schmunk, MD

Co-Moderator: Rebecca Hartman, PhD

- 1:00 pm – 1:15 pm **L47** **Two Fatalities Involving Hydroxychloroquine**
*Teresa Gray, PhD**; *Jennifer Ross, MD*; *Marianne Beynon, MD*
- 1:15 pm – 1:30 pm **L48** **An Unexpected Fatal Methadone Ingestion in a Child**
*Jordan Taylor, MD**
- 1:30 pm – 1:45 pm **L49** **A Toxicological and Pathological Re-Evaluation of Media-Reported Mitragynine (Kratom) Deaths in Florida**
*Marilyn Huestis, PhD**; *Karl Williams, MD*
- 1:45 pm – 2:00 pm **L50** **Endogenous Carbon Monoxide Due to Hemolytic Anemia: A Forensic Red Herring**
*Orianna Thomas, MSFS**; *Sandra Bishop-Freeman, PhD*
- 2:00 pm – 2:15 pm **I66** **Drug-Related Deaths in the Elderly: A Five-Year Overview of Western Michigan**
*Abigail Grande, MPH**; *Gemma Harkin, MPH*; *Bo Collins, MPH*; *Amanda Fisher-Hubbard, MD*
- 2:15 pm – 2:30 pm **I67** **Fatal Intoxications vs. Congenital Cardiac Disorders in Sudden Death: Where to Draw the Line?**
*Alexandra Dimitrova, RF**; *Simone Grassi, MD*; *Fabio Vaiano, PhD*; *Vincenzo Arena, MD*; *Oscar Campuzano, MD*; *Sabina Strano Rossi, PhD*; *Ramon Brugada, MD*; *Antonio Oliva, MD, PhD*
- 2:30 pm – 2:45 pm **I68** **Illicit Drug Deaths in Decedents Over 60 Years of Age in the City and County of San Francisco From 2020 to 2024**
*Ellen Moffatt, MD**; *Luke Rodda, PhD*; *Anson Tsang, MS*
- 2:45 pm – 3:00 pm **I69** **Sodium Azide/Nitrite Suicides in the Netherlands Between 2015 and 2022**
*Karen van den Hondel, PhD**; *Dominique van Pelt, MS*; *Lizanne Schweren, PhD*; *Manon Ceelen, PhD*
- 3:00 pm – 3:15 pm **I70** **Fatal Drug Intoxication in the Pediatric Population of El Paso, Texas**
Romina Malerba, MD; *Alejandro Partida Contreras, MD**; *Adam Gonzalez, MD*; *Mario Rascon, MD*
- 3:15 pm – 3:30 pm **BREAK**

Toxicology Special Session: Drugs and Driving

Moderator: Ayako Chan-Hosokawa, MS

Co-Moderator: Kayla Neuman, MS

- 3:30 pm – 3:45 pm **L51** **Recommendations for Drug Testing in Driving Under the Influence of Drugs (DUID) and Motor Vehicle Fatality Cases—2025 Update**
*Amanda D’Orazio, MS, D-AFBT-FT**; *Barry Logan, PhD*; *Amanda Mohr, MS*; *Ayako Chan-Hosokawa, MS*; *Curt Harper, PhD*; *Marilyn Huestis, PhD*; *Sarah Kerrigan, PhD*; *Jennifer Limoges, MS*; *Amy Miles, BS*; *Colleen Scarneo, MS*; *Karen Scott, PhD*
- 3:45 pm – 4:00 pm **L52** **New York’s Drug Recognition Expert (DRE) Oral Fluid Field Certifications**
*Jennifer Limoges, MS**

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4:00 pm – 4:15 pm	L53	How High Will It Go? The Alarming Rise of Fentanyl Tolerance <i>Ayako Chan-Hosokawa, MS*; Zachary Shaner</i>
4:15 pm – 4:30 pm	L54	Driving Under the Influence Snapshot: Uncovering Drug Prevalence Trends in Washington, DC <i>Kimberley Heine, MFS*; Samantha Tolliver, PhD</i>
4:30 pm – 4:45 pm	L55	Drug Use by Drivers in Fatal Traffic Crashes <i>Amanda Mohr, MS*; Grace Cieri, MS; James Gill, MD; Barry Logan, PhD</i>
4:45 pm – 5:00 pm	L56	Impaired Driving Cases With Gabapentin <i>Nicholas Tiscione, MS*; Edward Zumaeta, MS</i>

Friday

Novel Psychoactive Substances

Moderator: Tate Yeatman, F-ABFT, ABC-D

Co-Moderator: Lynn Wagner, PhD

8:00 am – 8:15 am	L57	2024 Novel Psychoactive Substance Trends and a Comparison Against NPS Discovery Scope Recommendations <i>Donna Papsun, MS*; Alex Krotulski, PhD; Barry Logan, PhD</i>
8:15 am – 8:30 am	L58	Metabolic Profiling of the Semi-Synthetic Tetrahydrocannabinols (THCs), Delta 10-THC, and Delta 6a,10a-THC, Using Human Liver Microsomes and LC/MS <i>Nathan Layle, MS*; Jonathon Bassman, MS; Marc Gregerson, PhD; Jeffrey Williams, MS; Donna Iula, PhD</i>
8:30 am – 8:45 am	L59	Cytochrome P450-Mediated Metabolism of Isotonitazene, a Novel Synthetic 2-Benzylbenzimidazole Opioid <i>Madison Schackmuth, PhD*; Sarah Kerrigan, PhD</i> <i>(FSF Emerging Forensic Scientist Award Oral Presentation)</i>
8:45 am – 9:00 am	L60	Metabolite Profile Commonalities of Methoxylated Fentanyl Analogs <i>Jillian Morgan, MS*; Candice Bridge, PhD</i>
9:00 am – 9:15 am	L61	Novel Psychoactive Substance Presence in Fentanyl/Norfentanyl-Positive Clinical Urine Specimens <i>Theresa Meli, MS*; Jillian Neifeld, MS; Sarah Bartock, PhD</i>
9:15 am – 9:30 am	L62	The Prevalence of p-Fluorofentanyl and Xylazine in Postmortem Fentanyl Casework: A Three-Year Retrospective Study <i>Marco Ballotari, PhD*; Michael Truver, PhD; Jennifer Hoyer, MS; Bruce Goldberger, PhD; Chris Chronister, PhD</i>
9:30 am – 9:45 am	L63	The Detection of Novel Psychoactive Substances in Urine Specimens From a Large United States Prison System <i>Jillian Neifeld, MS*; Theresa Meli, MS; Sarah Bartock, PhD</i>
9:45 am – 10:00 am	L64	Two Fatal Cases Involving N-Ethylpentadone in a Secured Forensic Psychiatric Clinic <i>Jeroen Roosendaal, PhD*; Ingrid Bosman, PhD; Pieter Van Driessche, MD; Janneke Hulshof, PhD; Bas van de Velde, MS; Theo Klein, PhD; Kristof Maudens, PhD</i>

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10:00 am – 10:15 am

BREAK

Alcohol & General Forensic Toxicology

Moderator: Michael Wagner, MS, PA

Co-Moderator: J. Hunter Fleming, MSFS

10:15 am – 10:30 am

L65

Insights Into Phosphatidylethanol (PEth) 16:0/18:1 Formation and Degradation Analysis by Supercritical Fluid Chromatography-Tandem Mass Spectrometry

*Munchelou Gomonit, BS**; *Markus Roman, MS*; *Britni Skillman, PhD*; *Michael Truver, PhD*;
Robert Kronstrand, PhD

(FSF Emerging Forensic Scientist Award Oral Presentation)

10:30 am – 10:45 am

L66

Alcohol Extrapolation: Contentions Within the Scientific and Legal Systems

*Kira Bochard, MScFS**; *Lynne Seborowski, JD*; *John Brick, PhD*

(FSF Emerging Forensic Scientist Award Oral Presentation)

10:45 am – 11:00 am

L67

Performing Blood Alcohol Calculations According to ASB 122 Using a Simple Spreadsheet

*Rebecca Hartman, PhD**; *Svante Vikingsson, PhD*

11:00 am – 11:15 am

L68

Drug-Facilitated Crime: A Seven-Year Review of Drug Positivity

*Meaghan Hessler, MSFS**; *Sherri Kacinko, PhD*; *Barry Logan, PhD*

11:15 am – 11:30 am

L69

An Investigation Into the Utility of Creatinine and the Submaxillary Gland Androgen-Regulated Protein 3B as Adulteration Biomarkers and Normalization Factors in Oral Fluid

*Marta Concheiro-Guisan, PhD**; *Christopher McGrowder, BS*; *Alejandro Ocampo, MS*;
Mechthild Prinz, PhD

11:30 am – 1:00 pm

BREAK

Toxicology Special Session: Pediatric Toxicology

Moderator: Nikolas Lemos, PhD

Co-Moderator: Timothy Rohrig, PhD

1:00 pm – 3:00 pm

L70

Postmortem Pediatric Forensic Toxicology: Children Are Not Small Adults

*Nikolas Lemos, PhD**; *Timothy Rohrig, PhD**