Firearms Admissibility Issues (Keynote) Jim Agar, Colonel, U.S. Army (Ret.)

United States v. Refinal Miller: 0 to Daubert in 24 Hours Arthur Andrade, Miami-Dade Police Department

An Empirical Study of the Glock Marking Barrel (GMB) Edward Burek, New Jersey State Police Stephen M. Deady, Delaware State Police

Case Study: Rubber Buckshot Tissue Penetration Ability **Dijana Coric**, *Washington State Patrol Crime Laboratory*

Affect of Manufacturer Finishing Methods on Subclass Characteristics Production on Breech Faces **Veronica Franklin**, *West Virginia University*

80% Firearms Kits Kirk Garrison, San Bernadino County Sheriff's Department

The Capital Gazette Newsroom Shooting Edward Gesser, Anne Arundel County Firearms Examination Unit

Two Wildlife Case Examples **Deborah Gillis**, Alaska Scientific Crime Detection Laboratory

Lead Isotope & Elemental Analysis to Associate Evidence Lifts, Bullet Fragments, and Bullets using MC-IP-MS and Q-ICP-MS **Dr. Gwyneth Gordon**, *Arizona State University*

Forensic Firearms ID Applied to Battlefield Archeology Lucian Haag, Forensic Science Services, Inc.

Two Wildlife Case Examples **Deborah Gillis**, Alaska Scientific Crime Detection Laboratory

AFTE Scholarship & Evaluation of Glock Aperture Shear Mark Individuality Based on 1,632 Different Pistols by Traditional Pattern Matching and IBIS Pattern Recognition **Jim Hamby,** *Indiana State Police (Ret.)*

Pressure Factors in Cartridge Case Comparisons James A. Hamilton, West Virginia University

2021- 2022 In Memoriam AFTE Sickness & Distress Committee Assessing the Thermal Stability of Toolmarks Casting Materials Through Optical Comparison Microscopy, Virtual Comparison Microscopy, and Quantitative Similarity Scores **Kai Yuan Yeoh**, *Health Sciences Authority, Singapore*

Evaluation of Muzzle-to-Target Distance Estimation by Machine Learning **Mike Kulsluski**, *Pennsylvania State University*

The Effects of Car Tires on Bullet Performance and the Potential Danger to Bystanders **Xiao Shan Law**, *New York State Police Forensic Investigation Center*

Case Study of a High-Profile Death Investigation **Michael Lee**, *Michigan State Police*

Firing Pin Imaging and Analysis in VCM Zachary Carr, Total Quality Forensics Ryan Lilien, Cadre Forensics

Results of the 3D Virtual Isolated Pairs (VIP) Study Zachary Carr, Total Quality Forensics Ryan Lilien, Cadre Forensics

The Impossible Shot: Reconstruction of Fatal Hunting Accident **Axel Manthei**, *Bayerisches Landeskriminalamt*

Preliminary Results from a Blind Testing Program in Firearms Examination Maddisen Neuman, Houston Forensic Science Center

Identification of Toolmarks Present on Additive Manufactured Components **Corey Scott**, *Federal Bureau of Investigation Laboratory Division*

NIBIN/CGIC Program at the SFPD Crime Laboratory Andy Smith, San Francisco Police Department

3D Technology Working Group Update Erich Smith, Federal Bureau of Investigation Laboratory Division

OSAC Update Andy Smith, San Francisco Police Department Erica Lawton, Alabama Department of Forensic Sciences FBI Laboratory Response to the Declaration Regarding Firearms and Toolmark Error Rates Field in Illinois v. Winfield
Erich Smith, Federal Bureau of Investigation Laboratory Division
Michael Smith, Federal Bureau of Investigation Laboratory Division

Virtual Image Standard (VIS) for Performance Evaluation of the Congruent Matching Cell (CMC) Algorithms in Firearm Evidence Identification John Song, National Institute of Standards and Technology (NIST)

Shooting Incidents in the Film & TV Industry: The Firearm Examiners Role and Analysis of Such Evidence **Pete Striupaitis**, Independent *Forensic Consultant*

Unpublished Research Subcommittee Update **Eric Warren**, SEP Forensic Consultants

The Relevance of Current Forensic Firearm Examination Techniques when Applied to 3D Printed Firearms **Zara Ellen Wenzinger**, *Duquesne University*

Virtual Peer Review: The Realities of Remote Verification **R.T. Wyant**, *Washington State Patrol Crime Laboratory* **Brian Smelser**, *Washington State Patrol Crime Laboratory*

Keep AFTE Weird, AFTE 2023, Austin, TX Kim Zeller, Houston Forensic Science Center Stephen Aston, Austin Police Department

Interlaboratory Comparison for 3D Analysis of Bullet Land Engraved Areas (LEA) Martin Baiker-Sorensen, Netherlands Forensic Institute Xiaoyu Alen Zheng, National Institute of Standards and Technology (NIST)

Population Statistics for Firearm and Toolmark Identification Martin Baiker-Sorensen, Netherlands Forensic Institute Johannes Soons, National Institute of Standards and Technology (NIST) Xiaoyu Alen Zheng, National Institute of Standards and Technology (NIST) Erich Smith, Federal Bureau of Forensic Science