

AFTE 2024 Technical Conference Presentations – Anchorage, AK

Note: Presentations are in order of presence in registration booklet for your reference to abstracts

2024 Keynote Speaker

Tami Truett Jerue, *Alaskan Native Women's Resource Center*

55th Annual AFTE Training Seminar – Anaheim, CA

Jessica Winn, *California Bureau of Forensic Services, Fresno Crime Laboratory*

Tara Heye, *Orange County Crime Laboratory*

OSAC Information and Updates

Andy Smith, *San Francisco Police Department Criminalistics Laboratory*

Todd Weller, *Oakland Police Department Crime Laboratory (Retired)*

Proficiency Test Review Committee Update

Andy Smith, *San Francisco Police Department Criminalistics Laboratory*

Todd Weller, *Oakland Police Department Crime Laboratory (Retired)*

Comparison of Machining Operations and the Effects on the Creation of Individual Characteristics on Machined Surfaces

Alexander Luby, *Unified Forensic Laboratory*

Analysis of Breech Face Marks with Heavy Subclass Influence Through Traditional and Novel Methods

Doug Lancon, *Montana DOJ Forensic Science Division*

Xiaoyu Alan Zheng, *National Institute of Standards and Technology (NIST)*

Firearm Parts Swapping and its Impact on Forensic Firearms Identification – A Case Study

Megan Pytlik, *San Francisco Police Department Criminalistics Laboratory*

Redefining the Crime Laboratory

Kristen Schaefer, *Yakima Valley Local Crime Laboratory*

Kathy Geil, *Yakima Valley Local Crime Laboratory*

Interoperability of Firearm Toolmark 3D Measurements on Objective Similarity Metrics

Xiaoyu Alan Zheng, *National Institute of Standards and Technology (NIST)*

Teardrop Shear: A Systematic Approach

Srini Rathinam, *Los Angeles Police Department*

An Update on the AFTE Scholarship Endowment Fund (ASEF)

James E. Hamby, *Retired*

Eat Piercing Gone Hog Wild – A Case Study

Jessica Winn, *California Bureau of Forensic Services, Fresno Crime Laboratory*

Establishing a National Ballistic Analysis System

Lehi Sudy dos Santos, *National Forensic Institute*

The History of the Scientific Crime Detection Laboratory: Goddard's Lab to the CPD Lab

Peter Striupaitis, *PS Forensic Consultants, LLC*

How Far Can You Go Without a Bullet Hole? A Case Study involving Cylinder Gap Distance Determination

Jonathan Charron, *Sacramento District Attorney's Criminalistics Laboratory*

Quantitative Analysis of Best Non-Matching Bullets from 10 Consecutively Manufactured Ruger Barrels

Andrew Boyle, *Forensic Technology – A LeadsOnline Company*

Persistence of Subclass Characteristics on Consecutively Manufactured Breech Faces

Veronica Franklin, *West Virginia University – Department of Forensic and Investigative Science*

Homemade Firearms with 3D Printed Parts

Carola Leva, *BKA*

Towards Rational and Explainable Quantification Methods to Support Firearm Common Source Determination

Serge Lévesque, *Ultra Forensic Technology*

Advancing the Understanding of 3D Imaging for Firearms Identification

Melissa Nally, *Houston Forensic Science Center*

Dr. Keika Hofmann, *Center of Statistics and Applications in Forensic Evidence (CSAFE)*

Announcing the Gunshot Residue Muzzle-to-Target Distance Determination Study

R. Austin Hicklin, *Forensic Science Group at Noblis*

(This presentation is grouped with the below presentation)

Accuracy of Bullet Comparison Decisions by Forensic Examiners (Partial presentation)

R. Austin Hicklin, *Forensic Science Group at Noblis*

(This presentation is grouped with the above presentation)

Distance Determination – An Unusual Case

Debra Gillis, *Alaska Scientific Crime Detection Laboratory*

Determination of a Type/Model of a Firearm by Cartridge Cases Using Machine Learning

Pavel Giverts, *Israel Police Department*

The Effect of Gunshot Angle on Distance Determination

Alexander Jason, *International Wound Ballistics Association*

What About Us? The Forensic Scientist & Mental Health

Jessica Winn, *California Bureau of Forensic Services, Fresno Crime Laboratory*

A Comprehensive Overview of A2LA and its Forensic Accreditation Program

Brittney Rollison, *American Association for Laboratory Accreditation (A2LA)*

Examination of Homemade Shotgun and Penetration Energy Determination

Asaf Hazon, *Israel Police Department*

The Effects of Fingerprint Development Techniques on Forensic Cartridge Case Identifications

Sasha Valentino, *Duquesne University*

Dismemberments, Machetes, and Tool Marks

Dijana Coric, *Washington State Patrol Crime Laboratory*

Acquire Cartridge Cases into IBIS While Inside DNA Free Containers

Linnéa Carlsson, *Swedish National Forensic Center*

DigiAmmo: An EU Funded ENFSI Project – How to Exchange and Assess 3D Forensic Ballistic Data

Thomas Liebscher, *BKA*

Application of the Finite Element Method to Forensic Firearm Investigations

James Hamilton, *West Virginia University*

Identification of Resizing Die Marks from a Carbide Die

Samantha Houle, *Alameda County Sheriff's Office Criminalistics Laboratory*

An Investigation into the Effects of Distance from a Discharged Firearm on the Levels of Gunshot Residue (GSR) Found on a Non-Shooter

Erica Brown, *Institute of Forensic Science and Legal Medicine, Firearm and Toolmarks Dept.*

Observed Effect of Using Recover Latent Fingerprint Technology (LFT) on Cartridge Case Tool Marks

Robert A. Johnson, *Albuquerque Police Department Crime Laboratory*

Toolmark Examinations of Privately Made Firearms

Samantha Karner, *Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE)*

The Effect of Decomposition Processes on Fired Bullet Striae

Matthew Bolton, *Australian Federal Police Department*

Microscopic Examination of Thermally Discharged Ammunition Components

Kevin Rippman, *Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE)*

Mark Gratkowski, *Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATFE)*

The Perils of Downloaded Cartridges for Firearms Identification Purposes

Lucian C. "Luke" Haag, *Forensic Science Services, Inc.*

(This presentation is grouped with the below presentation)

Some Properties of Forensic Value with Compensated Glock Pistols

Lucian C. "Luke" Haag, *Forensic Science Services, Inc.*

(This presentation is grouped with the above presentation)

Automated 3D High-Volume Triage (3DHVT) to Improve Efficiency of Firearm & Toolmark Casework

Zak Carr, *Cadre Research*

Admissibility Hearings – Silencing the Defense Expert

Jeff Salyards, *Center of Statistics and Applications in Forensic Evidence (CSAFE)*

Shots in the Dark: Using Luminescent Technology in the Detection of Lead Residues

Jill Prather, *Forensic Toolmark Consultants*

Algorithmic Matching of Striated Tool Marks

Yuhang (Tom) Lin, *Center of Statistics and Applications in Forensic Evidence (CSAFE), Iowa State University*

A Research Study Determining Cartridge Interchangeability Outside of Standard Interchangeability

Vanessa R. Foerch, *Michigan State Police Forensic Division, Grand Rapids Laboratory*