

H. Tredwell, M.S.

Education

Colorado State University, Ft. Collins, CO Master of Science – Anatomy (forensic),
Aug 20XX-12

Colorado State University, Ft. Collins, CO Bachelor of Science – Microbiology, May 20XX-13

Employment

- **Forensic Scientist III**, Ruston Police Department Crime Laboratory
Firearm/Toolmark Examiner, *November 20XX-9— Present*
- **Criminalist III**, Texas Department of Public Safety, Austin, TX
Firearm/Toolmark Examiner, *November (20XX-12)—20XX-9*

Firearm / Toolmark Examination

Examination and analysis of ballistic and toolmark evidence related to criminal incidents. Report generation and testimony of conclusions in courts of law. Examinations include:

- Bullet & cartridge case comparisons
- Firearm operability
- Proximity determination of muzzle to target
- Less lethal weapons
- Serial number restoration
- Toolmark comparisons
- Shooting scene reconstruction
- Evidence collection and interpretation

Professional Training

- **Firearm/Toolmark Analysis Training**, Texas Dept. of Public Safety,
November 20XX-11—December 20XX-9
- **Firearms and Ballistics Seminar**, University of Texas Austin, *March 20XX-10*
- **South Western Association of Forensic Scientists Meeting**, Tucson, AZ *October 20XX-9*
- **South Western Association of Forensic Scientists Meeting**, El Paso, TX *April 20XX-8*
 - **Firearms Evidence**
 - **Forensic Anthropology and Odontology**
 - **Bullet Impacts**
- **Drugfire Training**, Washington, DC, *October 20XX-10*

Entry 25: H. Tredwell, Firearms Examiner-2 of 5

- **Association of Firearm and Toolmark Examiners** Conference, Tampa, FL *July 20XX-9*
- **Association of Firearm and Toolmark Examiners** Conference, Williamsburg, VA *July 20XX-8*
- **Case Review**, Jamner County Medical Examiner, Bi-monthly meetings on forensic pathology, death scenes and wound ballistics. *March 20XX-8—present*
- **Expert Courtroom Testimony**, Snohomish County Prosecutor, *May 20XX-5*
- **Association of Firearm and Toolmark Examiners** Conference, San Antonio, TX *May 20XX-3*

○ **Ricochet Analysis Workshop**

- **BATF NIBIN Training**, Ft. Myers, FL *February 20XX-3*
- **Bloodstain Pattern Analysis (40 Hours)**, Bothell, WA *July 20XX-3*
- **TASER Conference**, Las Vegas, NV *April 2004, May 2006*, Scottsdale, AZ *April 20XX-2*
- **Investigation of Lethal Encounters**, Force Science Center, Burien, WA *June 20XX-2*
- **Canadian Officer Safety Conference**, Victoria, British Columbia *September 20XX-2*
- **American Academy of Forensic Scientists Conference**, Seattle, WA *February 20XX-1*

Armorer Schools

Factory authorized armory certification from the following manufacturers:

Sigarms (pistols)
Glock (pistols)
Smith & Wesson (pistols)
Ruger (rifle)
Remington (shotgun & rifle)
Heckler & Koch (SMG, shotgun, USP03)
Colt (M16/AR15 rifle)
PepperBall™
TASER (M26, X26)

Less Lethal Instructor Courses

ADVANCED TASER Instructor (M26, X26) *October 20XX-4*

TASER®- Master Instructor Scottsdale, AZ *April 20XX-3*

PepperBall™ Tacoma, WA *June 20XX-3*

In-Custody Death Investigation Instructor Scottsdale, AZ *August 20XX-3*

Professional Presentations

- “Identification of Automobile Wiring Harness”** Association of Firearm and Toolmark Examiners Conference, Williamsburg, VA
- “TASER—A new blast from the past”** Association of Firearm and Toolmark Examiners Conference, Newport Beach, CA
- “TASER—Revisited”** Association of Firearm and Toolmark Examiners Conference, San Antonio, TX
- “KIP—Knife Identification Project”** Association of Firearm and Toolmark Examiners Conference, San Antonio, TX
- “Forensic Testing of TASER Weapons”** Tactical TASER Conference, Las Vegas, NV, Los Angeles County Coroner
- “Forensic Evaluation of Less Lethal Impact Munitions, Flammability Testing of OC and TASER ”** Jamner County Medical Examiner, Ruston, MJ, Canadian Officer Safety Conference, Victoria, British Columbia
- “Flammability Testing of OC and TASER”** TASER Conference and Policy Forum, Scottsdale, AZ
- “Forensic Evaluation of Less Lethal Impact Munitions”** American Academy of Forensic Scientists Conference, Seattle, WA

Publications

- “Case Head Separation on a .357 Sig Cartridge Case”** AFTE Journal, Volume 31, Number 1
- “Aluminum Barreled Derringer”** AFTE Journal, Volume 32, Number 1
- “Lead is Lead”** AFTE Journal, Volume 34, Number 3
- “Sardius 9mm Semi-automatic pistol”** AFTE Journal, Volume 34, Number 3
- “9mm Smith and Wesson Ejectors”** AFTE Journal, Volume 34, Number 4
- “Consecutively Made Cartridge Cases”** AFTE Journal, Volume 34, Number 4
- “Asphalt Skip Shooting Reconstruction”** AFTE Journal, Volume 35, Number 1
- “Knife Identification Project (KIP)”** AFTE Journal, Volume 35, Number 4, Fall 20XX-3
- “The Advanced TASER M26,X26: Forensic Considerations”** AFTE Journal, Volume 36, Number 4, Fall 20XX-2

Court Testimony

Testified over 85 times as an expert witness in criminal courts of law in Texas and Major State. Testimony has included firearm and toolmark identification, weapon functionality, serial number restoration, distance determinations, crime scene reconstruction, less-lethal weapon analysis.

Forensic Proficiency Examinations

Helped design and produce forensic proficiency tests for firearm and toolmark examiners with Collaborative Testing Services from (20XX-7)—20XX-4. These tests are distributed to laboratories internationally as part of the accreditation process.

Research Projects

Designed and implemented the Knife Identification Project (KIP) with Ric Wyant. This project involved obtaining consecutively made knives for the purposes of studying microscopic individuality of tool marks. One hundred and thirty test kits were produced using these knife blades and distributed to laboratories worldwide. Results were compiled and error rates were published in the *Association of Firearm and Toolmark Examiner's* forensic journal.

Less Lethal Testing

Impact Munitions: Forensic testing of a variety on less-lethal impact ordnance (bean bags, sponge rounds, FN303, etc.) into ballistic gelatin to determine relative impact energy, penetration potential and relative lethality. *July 20XX-2*

TASER, OC Flammability: Evaluated 16 types of Oleoresin Capsicum aerosols when deployed simultaneously with the TASER M26 to determine flammability potential. *Dec 20XX-2*

Stinger and TASER Comparison Testing: Forensically compared Conductive Energy weapons in a scientific setting. *March 20XX-1*

Course Instruction

Continual forensic ballistic, trajectory, digital photography, TASER, less-lethal, and crime scene instruction to numerous police departments, prosecuting and defense attorneys in the Washington State area. *20XX-8—Present*

College Instruction:

Law enforcement instructor at Neva Community College, Neva, MJ

○ Forensic Photography

Law enforcement instructor at Skagit Valley College, Vernon, MJ 20XX-5

○ Interviewing and Interrogation

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Professional Affiliations

Association of Firearm and Toolmark Examiners, *March 20XX-9—Present*

- **Distinguished Member** *June 20XX-4 —Present*
- **Research and Development Committee** *May 20XX-2—Present*

American Academy of Forensic Scientists: Associate Member *February 20XX— Present*

FBI- Scientific Working Group on Firearms and Toolmarks (SWGgun), *June 20XX-2— Present*

NIJ- Technical Working Group on Less Lethal Weapons, *April 20XX—Present*

Awards

Director's Citation, Texas Department of Criminal Justice, *January 20XX-10*

Certificate of Appreciation, Sheriff's Association of Texas, *June 20XX-9*

Larry Warren Lindell Award, Neva County Sheriff, *June 20XX-6*

Reserve Deputy of the Quarter, Neva County Sheriff, *2001, 20XX-2*

Distinguished Member Award, Association of Firearm and Toolmark Examiners, *June 20XX-2*

Certificate of Appreciation, Neva County Sheriff, *November 20XX-2*

Employee of the Year, Major State Patrol Forensic Services Bureau, *May 20XX-1*