

## Eric M. Warren Jr, Ph.D, FA-AFTE

296 Washington Ave  
Memphis, TN 38103

work: (901) 303-8910  
warrenforensic@gmail.com

### PROFESSIONAL EXPERIENCE

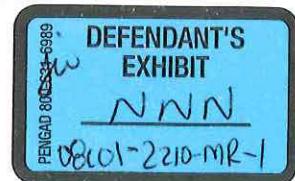
- 10/17 – Present      Consultant & Co-Owner, SEP Forensic Consultants, Memphis, TN  
Provide pretrial services to attorneys on cases with forensic firearm evidence, shooting trajectory determination, crime scene reconstruction, evidence collection, and provide advice on additional firearm testing. Provide assistance with discovery orders, expert testimony, and cross-examination of forensic scientists. Provide forensic training to law enforcement, attorneys, and educators.
- 08/09 – 10/17      Special Agent/Forensic Scientist, Tennessee Bureau of Investigation, Memphis, TN  
Performed chemical and physical examinations, analyzed and compared submitted evidence. Conducted microscopic examinations on bullets and cartridge cases for identification of manufacture and/or individualization to a specific firearm. Assigned to Violent Crime Response Team.
- 05/03 – 08/04      Research Assistant, Vanderbilt University, Nashville, TN  
Performed biochemistry experiments towards understanding cancer under the supervision of Dr. Ellen Fanning.
- 05/96 – 08/97      Laboratory Researcher, Vanderbilt University, Nashville, TN  
Under the guidance of Dr. Majed Dasouki, performed research on genetically inherited diseases such as hereditary pancreatitis.

### EDUCATION

- 08/04 – 08/09      Vanderbilt University- Nashville, TN  
Doctor of Philosophy in Biological Sciences, Emphasis in Biochemistry and Molecular Biophysics
- 08/00 – 05/04      Vanderbilt University- Nashville, TN  
Bachelor of Science in Molecular & Cellular Biology, Minors in Chemistry and Spanish
- 08/96 – 05/00      East Literature Magnet High School- Nashville, TN  
Graduated Valedictorian

### EXPERT TESTIMONY

- Shelby County (Memphis)  
Shelby County (Memphis)  
Shelby County (Memphis)  
Madison County (Jackson)  
Tipton County (Covington)  
Crockett County (Alamo)  
Davidson County (Nashville)  
Davidson County (Nashville)  
Davidson County (Nashville)  
Humphreys County (Waverly)  
Sumner County (Gallatin)  
Boone County (Burlington, KY)  
Hardin County (Elizabethtown, KY)  
McCracken County (Paducah, KY)  
Coconino County (Flagstaff, AZ)  
Madison County (Huntsville, AL)  
Decatur County (Decaturville, TN)
- Firearms Identification (Div 1, 2, 3, 4, 6, 7, 8, 9, 10)  
Shooting Incident Reconstruction (Div 1, 3, 4)  
Crime Scene Processing (Div 4)  
Firearms Identification (Div 1, 2, 3)  
Firearms Identification  
Firearms Identification & Crime Scene Processing  
Firearms Identification & Shooting Incident Reconstruction (Div 2)  
Firearms Identification (Div 3)  
Shooting Incident Reconstruction (Middle District of Tennessee)  
Crime Scene Investigation & Firearms Identification  
Forensic Scientist (Shooting Incident Reconstruction)  
Shooting Incident Reconstruction  
Firearms Identification  
Firearm and Ammunition Identification  
Firearms Identification  
Shooting Incident Reconstruction  
Shooting Incident Reconstruction



Haywood County (Brownsville, TN)	Shooting Incident Reconstruction
Hardin County (Savannah, TN)	Firearms Identification & Shooting Incident Reconstruction
Hinds County (Jackson, MS)	Firearms Identification & Shooting Incident Reconstruction
Lowndes County (Columbus, MS)	Firearms Identification
Wicomico County (Salisbury, MD)	Firearms Identification & Shooting Incident Reconstruction
Barren County (Glasgow, KY)	Firearms Identification & Shooting Incident Reconstruction
Washington, D.C.	Firearms Identification (Criminal Division)
Montgomery County (Trotwood, OH)	Firearms, Ballistics, & Shooting Incident Reconstruction

**RESEARCH PUBLICATIONS (Peer-Reviewed)**

1. Parish, K., Warren, E.M. The Case of Glock Auto Sears. *In preparation.*
2. Dorrel, J., Pellet-Vazquez, L., Allen, G., Dittemore, K., Downs, A., Dupre, J., Haag, M., Karsten, R., Layne, B., Martinez, C., Parian, J., Peterson, L., Slish, J., Stuart, J., Warren, E.M. G2 Research - A 2022 Ammunition Manufacturing Facility Tour. AFTE J. *In press.*
3. Warren, E.M., Sheets, H.D. (2023) The Inconclusive Category, Entropy, and Forensic Firearm Identification. *For. Sci. Intl.*, 349(August): 111741.
4. Rossi, P., Xing, Q., Bini, E., Portaliou, A., Clay, M.C., Warren, E.M., Khanra, N.K., Economou, A., Kalodimos, C.G. (2023) Chaperone Recycling in Late-Stage Flagellar Assembly. *J. Mol. Biol.*, 435(11).
5. Molans, Paul D., Warren, E.M. (2020) The History and Evolution of Ignition Systems. AFTE J., 52(3):134-164.
6. Warren, E.M. (2019) Review: "American Sherlock – Remembering a Pioneer in Scientific Crime Investigation". AFTE J., 51(3): 133-135.
7. Warren, E.M. (2018) A Comparison of Polymer Coated Bullets. AFTE J., 50(1): 43-46.
8. Warren, E.M., Sheets, H.D. (2017) Statistical Approaches to Type Determination of the Ejector Marks on Cartridge Cases. *J. For. Sci.*, 63(2): 431-439.
9. Warren, E.M., Pitts, S.L. (2016) Using Class Characteristics to Distinguish Glock from Smith & Wesson Sigma Pistols. AFTE J., 49(2): 70-78.
10. Vaithiyalingam, S., Warren, E.M., Eichman, B.F., and Chazin, W.J. (2010) Insights into eukaryotic DNA priming from the structure and functional interactions of the 4Fe-4S cluster domain of human DNA primase. *Proc. Natl. Acad. Sci.*, 107, 13684-13689.
11. Warren, E.M., Vaithiyalingam, S., Chazin, W.J., and Eichman, B.F. (2009) Physical interactions between Mcm10, DNA, and DNA polymerase alpha. *J. Biol. Chem.*, 284, 24662-24672.
12. Warren, E.M., Vaithiyalingam, S., Haworth, J., Greer, B., Bielinsky, AK., Chazin, W.J., and Eichman, B.F. (2008) Structural Basis for DNA Binding by Replication Initiator Mcm10. *Structure*, 16, 1892-1901.
13. Warren, E.M., Robertson, P., Zhang, H., Friedman, D.B., Lary, J.W., Cole, J.L., Tutter, A.V., Walter, J.C., Fanning, E., and Eichman, B.F. (2008) Domain Architecture and Biochemical Characterization of Vertebrate Mcm10. *J. Biol. Chem.*, 283, 3338-3348.
14. Zhou, Z, Desensi, SC, Stein, RA, Brandon, S, Dixit, M, McArdle, EJ, Warren, EM, Kroh, HK, Song, L, Cobb, CE, Hustedt, EJ, Beth, AH. (2005) Solution Structure of the Cytoplasmic Domain of Erythrocyte Membrane Band 3 Determined by Site-Directed Spin Labeling. *Biochemistry*, 4446, 15115-15128.

**PUBLISHED ABSTRACTS**

1. Warren, E.M., Xing, Q., Rossi, P. Kalodimos, C.G. Interactions of Bacterial Type III Secretion ATPase Flil with Flj. *XXVIII Int. Conf. Mag. Reson. Biol. Sys.* August 2018. Poster presentation, Dublin, Ireland 2018.
2. Warren, E.M., Metz, A.H., Tutter, A.V., Walter, J.C., and Eichman, B.F. Structural Studies of Mcm10, An Essential Replication Initiation Factor. *J. Biomol. Struct. Dyn* June 2007. Poster presentation, Albany 2007: The 15<sup>th</sup> Conversation. Albany, NY, June 2007.

**PRESENTATIONS**

1. Wrongful Conviction Q&A Panel. Cumberland University. CRJ 498W Special Topics: Wrongful Convictions. Online. April 2023 (Invited speaker)
2. Firearms and Shooting Incident Reconstruction. Shelby County Public Defender's Office. CLE series. December 2022 (Invited speaker)
3. Firearm and Toolmark Identification. Cumberland University. CRJ 421 Forensic Science. Online. September 2022 (Invited speaker)
4. From the Research Lab to the Crime Lab. Vanderbilt University ASPIRE Career Seminar. Nashville, TN. September 2022 (Invited speaker)
5. Firearms and Crime Scene Reconstruction. SEP Forensic Consultants Webinar. Online. February 2022. (Sponsoring speaker)
6. Everything you Never Knew you Needed to Know about Firearms Identification. TACDL Forensic Seminar. Knoxville, TN. June 2020 (Invited speaker)
7. From Crime Scene to Laboratory Report: Understanding Firearms, DNA, and other Forensic Evidence. TACDL Forensic Seminar. Memphis, TN. April 2019 (Invited speaker)
8. Firearms Identification Unit. Vanderbilt University Office of Career Development. Nashville, TN. February 2017. (speaker)
9. Firearms Identification Unit. Shelby County Sheriff's Office. Memphis, TN. June 2016. (speaker)
10. Distinguishing Cartridge Cases Fired in Glock and Smith & Wesson Sigma Pistols by Class Characteristics. AFTE Annual Training Seminar. New Orleans, LA. May 2016. (poster)
11. Firearms Identification Expert Testimony. District Attorney General Conference Trial Advocacy Course. Memphis, TN. March 2016 (speaker)
12. Crime Scene Reconstruction and Firearms Identification. Madison County Sheriff's Office. Jackson, TN. May 2015. (speaker)
13. The Firearms Identification Unit. TLETA City-County School. Donelson, TN. August 2014. (speaker)
14. Shooting Reconstruction and Toolmark Identification. TLETA Advanced Crime Scene Processing School. Donelson, TN. July 2014. (speaker)
15. TBI Crime Scene Response Team Presentation. Germantown Middle School Career Day. Germantown, TN. September 2013. (co-speaker)
16. Keynote Speaker for Nashville State Community College Police Science Academy Session XV Graduation. Nashville, TN. November 2011. (speaker)
17. Firearms Identification Unit. TLETA City-County School. Donelson, TN. October 2011. (speaker)
18. Firearms Identification Unit. Vanderbilt University Careers in the Biological and Biomedical Sciences Symposium. Nashville, TN. July 2010. (speaker)
19. Firearms Identification Unit. Austin Peay State University Forensic Science Lecture. Clarksville, TN. April 2010. (speaker)

## TRAINING

05/23	AFTE 2023 Training Conference
04/23	International Ammunition Association International Cartridge Show
03/23	FARO Zone — From Field to Finish Webinar Course
01/23	National Shooting Sports Federation SHOT Show
11/22	AFTE Manufacturing Methods of Glock Pistols Webinar
11/22	Forensics @ NIST 2022 Conference
09/22	Shooting Incident Reconstruction Comprehensive Course
07/22	AFTE 80% Firearms Webinar
06/22	AFTE 2022 Training Conference
04/22	International Ammunition Association International Cartridge Show
11/21	Midwest Firearms Training Seminar

09/21 IAFSM Sketchup 3D Crime Scene Reconstruction Webinar  
08/21 AFTE 2021 Training Conference  
06/21 ASCLD Train the Director Series - Firearms 3D Technology Course  
04/21 CSAFE Statistical Thinking for Forensic Practitioners Short Course  
04/21 FARO Crime Reconstruction Workshop  
03/21 International Ammunition Association International Cartridge Show  
02/21 NIJ Forensic Science R&D Symposium  
12/20 Ultra Multi-Caliber Quantitative Analysis Webinar  
11/20 Forensics @ NIST 2020 Conference  
10/20 SWAFS (Southwestern Association of Forensic Scientists) 2020 Training Conference  
05/20 Understanding the Statistics Behind Forensic Conclusions Workshop  
02/20 St. Jude/Memphis Police Dept. Active Shooter Training  
02/20 NIJ Forensic Science R&D Symposium  
05/19 AFTE 2019 Training Conference  
05/19 Hi-Point Armorers Course  
04/19 TACDL Forensic Seminar  
02/19 Emerging Forensic Research Series: Firearms and Toolmarks Research Course  
11/18 Forensics @ NIST 2018 Conference  
03/18 International Ammunition Association International Cartridge Show  
01/18 A Close Look at 3D Microscopy for Firearms Identification Webinar  
08/17 Glock Armorer's Course  
05/17 Team One Network Smith & Wesson M&P Armorer's Course  
05/17 Team One Network Springfield 1911 Armorer's Course  
05/17 AFTE 2017 Training Conference  
04/17 International Ammunition Association International Cartridge Show  
03/17 TacticalLogic AR-15/M16 Armorer's Course  
06/16 AFTE 2016 Training Conference  
05/16 ERASE Active Shooter Train-the-Trainer  
04/16 ALERRT Active Shooter Training  
03/16 International Ammunition Association International Cartridge Show  
02/16 NIJ 2016 Forensic Science R&D Symposium  
01/16 Firearms Identification for Supervisors Training  
11/15 Forensic Ammunition Service Training  
04/15 FTI BrassTrax HD3D and MatchPoint+ Training  
04/15 International Ammunition Association International Cartridge Show  
02/15 UND Death Investigator Training  
12/14 TBI Firearms Instructor School  
05/14 RTI Shooting Reconstruction Course  
04/14 International Ammunition Association International Cartridge Show  
04/14 Preventing Violence Against Law Enforcement Officers & Ensuring Survivability  
04/14 Active Shooter Symposium  
02/14 ATF Serial Number Restoration Course  
03/13 International Ammunition Association International Cartridge Show  
12/12 WVU Shooting Reconstruction Course  
10/12 WVU Continuing Education: Toolmark Identification Course  
10/12 WVU Continuing Education: Serial Number Restoration Course  
08/12 ASCLD/LAB Measurement Confidence 200 Level Course  
07/12 ASCLD/LAB Measurement Confidence 100 Level Course  
07/12 WVU Crime Scene Investigation Course  
07/12 WVU Introduction to Bloodstain Pattern Analysis Course  
07/12 WVU Introduction to Firearms and Toolmark Identification Course  
05/12 Glock Armorer's Course  
05/12 Sig Sauer Armorer's Course  
05/12 International Association of Law Enforcement Firearms Instructors Conference  
04/12 International Ammunition Association International Cartridge Show  
02/12 TBI Crime Scene In-Service Training  
01/12 National Shooting Sports Federation SHOT Show  
11/11 Edge FX Vista 3D Crime Scene Reconstruction

10/11 New England Firearms Manufacturing Plant Tours  
09/11 TBI Firearm and Toolmark Examiner Training  
09/11 Colt Armorer's Course  
05/11 ATF Integrated Ballistics Identification System Course  
01/11 TBI Basic Criminal Investigator School  
12/10 FBI Gunshot Residue School  
08/10 TBI Crime Scene Processing School

**FACTORY/LABORATORY TOURS**

05/23 Parabellum Research Ammunition  
05/23 Jesse James Firearms Unlimited  
09/22 Louisiana State Police Crime Laboratory, Baton Rouge  
07/22 Forensic Ammunition Services Inc.  
07/22 Michigan State Police Crime Laboratory, Grand Rapids  
06/22 G2 Research Ammunition  
02/20 CMT Tactical  
05/19 Beretta Firearms  
08/18 An Garda Síochána, Ireland National Police, Firearms Unit  
08/18 Forensic Science Ireland Crime Laboratory  
06/18 Israel National Police Headquarters, Firearms Laboratory  
04/17 Mueller Industries Copper Tube and Pipe  
04/17 Winchester Ammunition  
03/17 Tennessee Arms Company  
03/17 Tennessee Cartridge Company  
03/17 Barrett Firearms Manufacturing  
02/17 Mid-South Munitions  
12/16 Colorado Bureau of Investigation Crime Laboratory, Aurora  
05/16 Arkansas State Crime Laboratory  
05/16 Remington Ammunition  
03/16 Ruger Precision Metals  
11/15 Metro Nashville Crime Laboratory  
04/15 St. Louis County Crime Laboratory  
08/13 Gerdau Steel Mill  
10/11 Mossberg Firearms  
10/11 Drill Masters  
10/11 Charter Arms  
10/11 Wilson Arms  
10/11 Lyman Products  
10/11 Colt Firearms  
10/11 Smith & Wesson  
10/11 Savage Arms  
10/11 Springfield Armory  
10/11 Kahr Arms  
10/11 Sturm Ruger  
10/11 Remington Firearms  
10/11 Harrington & Richardson  
10/11 Marlin Firearms  
12/10 Lake City Ammunition Plant

**PROFESSIONAL ORGANIZATIONS**

01/22 - Present NSSF SHOT Show Safety Advisor  
10/21 – Present Organization of Scientific Area Committees  
*Serving on the Firearm and Toolmark Subcommittee*  
04/21 – Present Association of Crime Scene Reconstruction  
01/13 – Present International Ammunition Association  
02/10 – Present Association of Firearm and Toolmark Examiners (AFTE)

*Serving on the Board of Directors and the Editorial Committee. Previously served on Electronic Resource Committee and Chair of the Unpublished Research Subcommittee*

04/12 – 04/13	International Association of Law Enforcement Firearms Instructors (IALEFI)
10/09 – 01/13	Tennessee Division of International Association for Identification (TN-IAI) <i>Served on the Board as Newsletter Editor</i>
2005-2009	Vanderbilt Molecular Biophysics Training Program
2005-2009	Vanderbilt Center of Chemical Biology
2004-2009	Vanderbilt Center for Structural Biology
2003-2006	Howard Hughes Medical Institute Community of Scholars

#### **TEACHING/MENTORING**

*Special Agent/Forensic Scientist*

02/16 – 10/17 Brock Sain

*Graduate Students*

01/08 – 03/08	Suraj Adhikary
10/06 – 12/06	Patrick Robertson
10/06 – 12/06	Wes Dulaney
03/06 – 05/06	Amanda Hafer
08/05 – 10/05	Shobhana Gupta

*Undergraduate Students*

06/06 – 08/06	Abby Stufflebam
06/05 – 08/05	Gary Mak
06/05 – 12/05	Audrey Herrin
06/04 – 08/04	Alexander Page
06/03 – 08/03	Erik Hysinger
06/03 – 08/03	Kristen Henson

*Courses*

06/23 – 08/23	SOC 411 - Forensic Science Internship, Union University
08/22 – 12/22	SOC 308 - Introduction to Forensic Science, Union University
08/07 – 12/07	BSCI 111 - Biological Sciences Laboratory, Vanderbilt University