

### PROFESSIONAL EXPERIENCE

Chris Coleman has a BS in Forensic Science and over 29 years of experience in forensic science with city and county law enforcement agencies, including fifteen years with the Contra Costa County Sheriff's Crime Laboratory (nine as supervisor). He has been court qualified in firearms and toolmark examination, shooting incident reconstruction, crime scene processing, blood spatter interpretation, controlled substance analysis and latent print processing. He holds expertise in firearms examination, shooting reconstruction, crime scene processing and blood spatter analysis. He is a fellow of the American Board of Criminalistics and has held certifications in firearms, toolmark, distance determination and gunshot residue by the Association of Firearms and Toolmark Examiners (AFTE). He has published and extensively taught various firearms-related subjects to law enforcement, medical and legal groups, including a recurring shooting incident reconstruction class with the California Criminalistics Institute (CCI). He is a California POST certified Firearms and Force Options instructor and range master. He is also a past president of the California Association of Criminalists (CAC).

### **EDUCATION**

• Aug 1988 – May 1991: Casper College, Casper, WY

Chemistry/Criminal Justice

• Sept 1991 – Dec 1993: California State University, Sacramento

BS, Forensic Science

• Sept 1995 – May 1996: California State University, Los Angeles

Criminalistics

#### **EMPLOYMENT**

- Senior Forensic Scientist, Forensic Analytical Sciences, October 2017 Present
- Contract Firearms Examiner, Ron Smith & Associates, June 2016 September 2017
- Deputy Sheriff Forensic Supervisor (Sgt), Contra Costa County Sheriff, Feb. 2007 June 2016
- Deputy Sheriff Criminalist III, Contra Costa County Sheriff, November 2001 February 2007
- Criminalist II/III, Santa Clara County District Attorney's Office, August 1996 October 2001
- Criminalist I, Los Angeles Police Department, May 1995 August 1996
- Teaching Assistant (Forensics), California State University (Sacramento), June 1993 August 1993 and June 1992 – August 1992
- Student Intern, California Criminalistics Institute, June 1992 August 1992

#### PROFESSIONAL LICENSES/CERTIFICATION

- Diplomate, American Board of Criminalistics, 1998 2014
- Fellow, American Board of Criminalistics, 2014 present
- Associate of Firearms and Toolmark Examiners

- Firearms certification (written tests) 1999
- o Firearms and toolmark practical's 2009 2019
- o Distance determination and gunshot residue, 2010 2016
- ASCLD/LAB certified assessor, 2012

### **TESTIMONY EXPERIENCE**

Testified in California, Nevada, New Mexico, Illinois, Oregon, Oklahoma, Colorado, and the District of Columbia, including State and Federal courts.

•	Controlled Substance Analysis:	74 times	1995 to Present
•	Crime Scene Processing:	21 times	1996 to Present
•	Firearms Examination/SIR:	277 times	1997 to Present
	<ul> <li>Force Options</li> </ul>	34 times	2006 to Present
	o GSR	42 times	1997 to Present
•	Latent Print Processing:	9 times	1997 to Present
•	Total	381 times	1995 to Present

#### PROFESSIONAL AFFILIATIONS

- California Association of Criminalists (CAC), June 1992 present
- Northern California Firearms Study Group, August 1996 present
- Chairman of North California Firearms Study Group, January 2004 June 2017
- NIBIN User Group, May 1997 June 2012
- American Academy of Forensic Sciences, February 1998 present
- Association of Firearms and Toolmark Examiners (AFTE), July 1999 present
- National Rifle Association, June 1983 present
- International Wound Ballistics Association (disbanded), June 1999 2003
- CAC Training and Resources Committees, 2004 2010
- President, CAC, 2015 2016
- Documentation Sunset Committee, AFTE, 2004 2005
- Assisted with drafting Documentation Standards, AFTE, 2005

# **SPECIAL TRAINING**

•	California CCW Update	Jan. 2025
	Dr. Nick Perjanik	
	Placer Sporting Club (8 hrs)	
•	NorCal Firearms Study Group meeting	Oct. 2024
	Various topics and speakers	
	Sacramento DOJ (4.5 hrs)	
•	Ballistics Trauma: Understanding Gunshot Wounds	Aug. 2024
	Lori Combs BS, RN, CFN Godoy Medical Forensics	
	Virtual Online class (1 hour)	
•	Long Range Ballistics w/ Kestrel	July 2024
	Katie Godfrey & Joe Racosky – Kestrel	
	Virtual Online class (3 hrs)	
•	AFTE Meeting	May 2024
	Various topics and presenters	-
	Anchorage, AK (22.5 hrs)	

•	The Terminal Ballistics of Sheet Metal Mike Haag & Rick Wyant	May 2024
	Anchorage, AK (5 hrs)	M 2024
•	Intro to Precision Rifle Series  Mark Zariah - Waast Coast Lang Banga	May 2024
	Mark Zorich – Weast Coast Long Range	
_	Esparto, CA (6 hrs)	Nav. 2022
•	NorCal Firearms Study Group meeting	Nov. 2023
	Various topics and speakers	
_	Sacramento DOJ (3.5 hrs)	C + /O - + 2022
•	Long Range Precision Shooting	Sept/Oct. 2023
	Mark Zorich – West Coast Long Range	
_	Esparto, CA (16 hrs)	Mary 2022
•	Blind Testing and Verification in Firearms	May 2023
	Donna Eudaley, Annalivia Harris, Callan Hundl	
_	Austin, Texas (4 hrs)	Mary 2022
•	Ring of Fire Armorer's course Brian Smelser	May 2023
	Austin, Texas (4 hrs)	May 2022
•	PhotoGunMetry Kristen Schaefer & Aaron Brundell	May 2023
	Austin, Texas (4 hrs)	
	· · · · · · · · · · · · · · · · · · ·	May 2022
•	AFTE Meeting Various topics and speakers	May 2023
	Austin, Texas (24 hrs)	
•	NorCal Firearms Study Group	May 2023
	Multiple speakers / presented.	Way 2023
	San Francisco Crime Lab (5 hrs)	
•	Concealed Carry Weapons	Dec. 2022
	Chris Gulbrandson – Defense Triad	1966. 2022
	CCW refresher class (4 hrs)	
•	Firearms and Toolmarks Policy and Practice Forum	Jan. 2022
	Multiple speakers	
	Virtual Online Forum (14 hrs)	
•	Effects of Time on Rusted FA ID	Jan. 2022
	David Glatter Miami, Fl	
	Virtual Online Workshop (1 hour)	
•	CAC Firearms Study Group	Dec. 2021
	Various speakers	
	Virtual Online workshop (3 hours)	
•	Springfield Armory 1911 Armorers Courts	Aug. 2021
	Gary Monreal Team One Network	
	Miami, Fl (8 hours)	
•	AFTE Meeting	Aug. 2021
	Various Topics	
	Miami, Fl (24 hours)	
•	Practical Applications of 3D Tech, Analysis, Stats	Aug. 2021
	Alan Zheng, Dr. Ryan Lilien, et al.	
	Miami, Fl (8 hours)	
•	Glock Talk	Jan. 2021

Omar Felix Virtual Online workshop (2 hours)

•	CAC General Crime Scene workshop	Dec. 2020
	Various speakers / topics	
	Virtual Meeting online (4 hours)	
•	CAC Bloodstain Pattern Analysis workshop	Dec. 2020
	Various speakers / BPA topics	
	Virtual Meeting online (4 hours)	
•	Northern California Firearms Study Group	Dec. 2020
	Multiple presenters and topics	
	Virtual Meeting online (4 hours)	
•	Concealed Carry Weapons	Dec. 2020
	Josh McClanahan FoxHole Tactical	
	CCW license refresher class (4 hours)	
•	Introduction to Statistical Thinking for Forensics	Jan. 2020
	Dr. Hal Stern, UC Irvine	
	San Francisco, CA (6 hours)	
•	NorCal Firearms Study Group	Nov. 2019
	Various speakers (Presented)	
	Sacramento, CA (6 hours)	
•	CSDIAI Annual Seminar	April 2019
	Various speaker (Presented workshop)	-
	Burlingame, CA (8 hours)	
•	NorCal Firearms Study Group	Sept 2018
	Various speakers (Presented)	•
	Sacramento, CA (6 hours)	
•	Statistics for Data Analysis	August 2018
	Jose Portilla/Pierian Data Inc.	C
	Udemy online (5.5 hours)	
•	Barrel Manufacturing Workshop	June 2018
	Allan Offringa, ATF Retired	
	Charleston, West Virginia (4 hours)	
•	LWRCI manufacturing / AR-15 function	June 2018
	Joseph Martin, LWRCI	
	Charleston, West Virginia (4 hours)	
•	AFTE meeting	June 2018
	Various topics	
	Charleston, West Virginia (40 hours)	
•	Concealed Carry Weapons	April 2018
	Josh McClanahan FoxHole Tactical	1
	CCW license class (8 hours)	
•	Mideo training	August 2017
	Ashley Rachel/Travis Larkin	8
	Washington D.C., DFS (4 hours)	
•	Mideo training	July 2017
	Steve Scarbourgh	
	Washington D.C., DFS (3 hours)	
•	Testimony training in the PCAST era	June 2017
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Multiple Speakers Washington D.C., DFS (4 hours)

•	Cybersecurity training Octo	May 2017
	Washington D.C., DFS (2 hours)	
•	PCAST training	February 2017
	Multiple Speakers	10014419 2017
	Washington D.C., DFS (4 hours)	
•	CAC Biannual Seminar	November 2016
	Multiple Speakers	11010111001 2010
	Palm Springs, CA (24 hours)	
•	CAC Biannual Seminar	May 2016
	Multiple Speakers	-: <b>j</b>
	Los Angeles, CA (24 hours)	
•	Ammunition Reloading: Forensic Issues	March 2016
	Mike Giusto, CCI	
	Sacramento, CA (24 hours)	
•	CAC Biannual Seminar	September 2015
	Multiple Speakers	1
	San Mateo, CA (24 hours)	
•	Assertive Supervision Workshop	September 2015
	Marin Consulting/CA POST	•
	Dublin, CA (24 hours)	
•	Bloodbourne Pathogens Safety	August 2015
	Target Solutions	
	Martinez, CA (8 hours)	
•	CAC Biannual Seminar	May 2015
	Multiple Speakers	
	Ventura, CA (24 hours)	
•	CAC Biannual Seminar	October 2014
	Multiple Speakers/Workshop presenter	
	Rohnert Park, CA (40 hours)	
•	ASCLD/LAB Certified Technical Assessor	September 2014
	ASCLD/LAB	
	Martinez, CA (8 hours)	3.6. 201.4
•	CAC Biannual Seminar	May 2014
	Multiple Speakers	
_	San Diego, CA (24 hours)	F-1 2014
•	Sig Sauer Pistol Armorer's Course	February 2014
	KC Frederick/Sig Sauer Contra Costa Sheriff's Office Range (24 hours)	
	Basic Internal Affairs Investigations	October 2013
•	Gary Gregson/D-Prep	October 2013
	Martinez, CA (40 hours)	
•	AFTE Meeting	June 2013
_	Various topics	June 2013
	Albuquerque, NM (48 hours)	
•	Suppressor Design and Function	May 2013
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Dr. Phil Dater, Gemtech Contra Costa Sheriff's Office Range (24 hours)

•	CLETS Training Debi Yeager Tech Services	March 2013
	Martinez, CA (4 hours)	
	AICC Post Instructor Training	October 2012
•	California POST	October 2012
	Contra Costa LETC (40 hours)	A
•	Sound Level Measurement	August 2012
	Quest Technologies	
	Emeryville, CA (8 hours)	1.6
•	CAC Biannual Seminar	May 2012
	Multiple Speakers/Presenter	
	Bakersfield, CA (16 hours)	
•	ISO Assessors Training	October 2011
	Anja Enle, ASCLD/LAB	
	Los Angeles, CA (40 hours)	
•	AAFS Meeting	February 2011
	Multiple Speakers	
	Chicago, IL (40 hours)	
•	Criteria for Identification Refresher	November 2010
	John Murdock and Bruce Moran	
	Sacramento, CA (24 hours)	
•	Leica Scanning Conference Task Force	October 2010
	Tony Grissim/Leica GeoSystems	3000012010
	San Ramon, CA (4 hours)	
	Leica Laser Scanning for SIR Workshop	October 2010
	Mike Haag	October 2010
	Contra Costa Sheriff's Office (8 hours)	
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•	Bullet Performance, Perforation of and Deflection	May 2010
	Luke Haag, Mike Haag	
	Henderson, NV (8 hours)	N. 2010
•	AK & SKS Weapon System Familiarization	May 2010
	Matt Babb, Long Mountain Outfitters	
	Henderson, NV (4 hours)	
•	High Speed Video of Firearms Discharge Events	May 2010
	Rich Sutherland, Integrated Design Tools	
	Henderson, NV (4 hours)	
•	AFTE Meeting	May 2010
	Various topics	
	Henderson, NV (24 hours)	
•	Mini-CMS Workshop	April 2010
	Bruce Moran and John Murdock	
	Contra Costa Sheriff's Office (6 hours)	
•	Machine gun Design and Modification Workshop	October 2009
	Ed Peterson, CAC	
	San Jose, CA (8 hours)	
•	Incident Command System 300/400	August 2009
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ASCLD/LAB Oakland, CA (24 hours)  • FX3 Crime Scene Diagramming Software Sam El-Said Contra Costa Sheriff's Office (24 hours)  • Advanced Bloodstain Analysis Tom Bevel  February 20	800
<ul> <li>FX3 Crime Scene Diagramming Software         Sam El-Said         Contra Costa Sheriff's Office (24 hours)</li> <li>Advanced Bloodstain Analysis</li> <li>February 20</li> </ul>	800
Sam El-Said Contra Costa Sheriff's Office (24 hours)  • Advanced Bloodstain Analysis February 20	800
Contra Costa Sheriff's Office (24 hours)  • Advanced Bloodstain Analysis February 20	
Advanced Bloodstain Analysis     February 20	
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FBI-ERT, Oakland, CA (40 hours)	ገበዩ
Ballistic Experiments  January 20	
Yuma Proving Grounds	<i>J</i> 06
Yuma, AZ (16 hours)	
• Firearms Manufacturing January 20	200
Ruger Firearms	<i>J</i> 06
Prescott, AZ (4 hours)	
• Identification of Building Materials September 20	007
Bill Schneck, CCI	<i>301</i>
Sacramento, CA (638 hours)	
• Tactics for the Supervisor  July 20	007
Fred Pryor Training	507
Clayton, CA (8 hours)	
• Supervisor Training (Sergeant) August 20	007
Sacramento Regional Training Center	507
Sacramento, CA (80 hours)	
• ISO Standards for Firearms Examiners  June 20	007
ASCLD/LAB & ISO	507
San Francisco, CA (4 hours)	
• Investigating Long Range Shootings & June 20	007
Sniper Cases II; Luke Haag, FSSI	
San Francisco, CA (16 hours)	
• AFTE Meeting June 20	007
Various Topics	
San Francisco, CA (40 hours)	
• Ballistic Vest Testing February 20	007
Gator Hawk, Armor Holdings	
Contra Costa Sheriff's Range (8 hours)	
• Investigating Long Range Shootings & June 20	006
Sniper Cases; Luke Haag, FSSI	
Springfield, MA (8 hours)	
• Integrity Character, and Ethics in Forensic Science June 20	006
Dan Gunnel	
Springfield, MA (4 hours)	
• AFTE Meeting June 20	006
Various Topics/Tour of Manufacturers	
Springfield, MA (40 hours)	
• Force Options Simulator Instructor April 20	)06

Jeff Anderson Contra Costa Sheriff's Office (40 hours)

•	Winchester Wound Ballistics Workshop Adamsons Police Products	February 2006
•	South San Francisco Police Department, CA (4 hours) Remington Wound Ballistics Workshop Mark Cockman, Remington LE	December 2005
•	Union City Police Department, CA (4 hours) Patrol Rifle Operator Contra Costa Sheriff's Office	December 2005
•	Contra Costa Sheriff's Range (24 hours) Patrol Rifle Instructor Sacramento Regional Training	December 2005
•	Sacramento, CA (24 hours) Firearms Instructor Sacramento Regional Training Sacramento, CA (80 hours)	November 2005
•	Sacramento, CA (80 hours) SuperFume Training Robert Kelly, Foster Freeman Martinez, CA (2 hours)	September 2005
•	Gemtech Suppressors and Suppressor Technology Philip Dater Indianapolis, IN (3 hours)	June 2005
•	Firearms Misadventures Luke Haag	June 2005
•	Indianapolis, IN (8 hours)  AFTE Meeting  Various Topics  Indianapolis, IN (40 hours)	June 2005
•	Indianapolis, IN (40 hours) Glock Armorer's Class Chad Pierce, Glock Contra Costa Shariff's Office Range (8 hours)	June 2005
•	Contra Costa Sheriff's Office Range (8 hours) Sig Sauer Armorer's Class KC Fredrick, Sigarms Contra Costa Sheriff's Office Range (16 hours)	June 2005
•	Contra Costa Sheriff's Office Range (16 hours) Shooting Reconstruction Gunsite/Luke Haag and Mike Haag Prescott, AZ (44 hours)	November 2004
•	Serial Number Restoration Mike Giusto, CCI	August 2004
•	Sacramento, CA (24 hours) Full Auto Conversions Richard Vasquez, BATF Vancouver, BC (8 hours)	May 2004
•	Vancouver, BC (8 hours)  AFTE Meeting  Documentation Standard, Ethics  Vancouver, BC (40 hours)	May 2004
•	Vancouver, BC (40 hours) Armorer's Class (Rem 870, Rem 700, AR-15)	February 2004

Ron Fruguiti Martinez, CA (40 hours)

•	Firearms Safety	December 2003
	Mike Giusto, CCI	
	Dublin, CA (24 hours)	
•	Bullet Ricochet	April 2003
	Luke Haag, FSSI	
	Reno, NV (8 hours)	
•	Bloodstain Pattern Analysis	October 2002
	Tom Bevel, TBI	
	Oakland, CA (40 hours)	
•	Clan Lab Processing	September 2002
	CCI/Department of Justice	1
	Sacramento, CA (40 hours)	
•	Terminal Ballistics	August 2002
	Hornady/Nice Shot	1148451 2002
	Ione, CA (6 hours)	
	Basic POST Academy	January – May 2002
	Contra Costa Sheriff's Office	January – Way 2002
	Antioch, CA (1000+ hours)	
_		October 2001
•	Presumptive Blood Screening	Octobel 2001
	Santa Clara County Crime Laboratory	
	San Jose, CA (20 hours)	0 -4 -1 2001
•	Officer Involved Shooting Crime	October 2001
	Scene Reconstruction/CAC	
	Oakland, CA (4 hours)	a . 1 2001
•	Latent Prints Processing	September 2001
	Department of Justice	
	San Jose, CA (8 hours)	
•	AFTE Meeting	July 2001
	Criteria Symposium, Armorer's Class	
	Newport Beach, CA (40 hours)	
•	Machine Shop Orientation/Practical	December 2000
	Northern California Firearms Study Group	
	Lodi, CA (8 hours)	
•	AFTE Meeting	July 1999
	Certification Tests, Criteria Workshop	
	Williamsburg, VA (40 hours)	
•	Wound Ballistics Workshop	June 1999
	International Wounds Ballistics Association	
	San Mateo, CA (8 hours)	
•	Toolmark Criteria for Identification	May 1999
	CCI	·
	Sacramento, CA (40 hours)	
•	Flourescein Processing	December 1998
	Santa Clara County Crime Lab	
	San Jose, CA (8 hours)	
•	Bullet Path Reconstruction/Analysis	September 1998
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CCI Sacramento, CA (40 hours)

• Firearms and Toolmarks Identification II March 1998 CCI Sacramento, CA (40 hours) • Firearms and Toolmarks Identification I February 1998 CCI Sacramento, CA (40 hours) • Latent Prints Processing September 1997 Santa Clara County Crime Lab San Jose, CA (16 hours) • Firearms Examination and Identification November 1996 Santa Clara County Crime Lab thru November 1997 San Jose, CA (1200+ / 600+ hours) continued thru November 2001 • Bullet Path Reconstruction October 1996 **Evergreen Community College** San Jose, CA (16 hours) IBIS Operation and Administration September 1996 Forensic Technology, Inc. San Jose, CA (40 hours) • Crime Scene Investigation I February 1996 CCI Los Angeles, CA (40 hours) Mass Spectra – Theory and Interpretation January 1996 CCI San Diego, CA (32 hours) • Firearms Examination November 1995 to April 1996 Los Angeles Police Department/SID Los Angeles, CA (96 hours) • Courtroom Testimony October 1995 Ray Davis, CCI Long Beach, CA (12 hours) • Crime Scene Processing September to December 1995 Los Angeles Police Department/SID Los Angeles, CA (128 hours) • Controlled Substance Analysis May to September 1995

### PUBLICATIONS/PRESENTATIONS/RESEARCH

Los Angeles Police Department/SID

Los Angeles, CA (240 hours)

- 1. US vs Marquette Tibbs, presented at the Northern California Firearms Study Group Meeting, Sacramento, CA, Oct. 30<sup>th</sup>, 2024.
- 2. Teslong Digital Borescopes, presented at the Northern California Firearms Study Group Meeting, Sacramento, CA, Nov. 7<sup>th</sup>, 2023.

- 3. The Kali Key, presented at the Northern California Firearms Study Group Meeting, San Francisco, CA May 17<sup>th</sup>, 2023. Also presented during BYOS session at AFTE Austin, 2023.
- 4. Get the Blood Out! Cleaning Bloody Bullets, presented at the 2021 AFTE meeting, Miami, FL, Aug. 26<sup>th</sup>, 2021.
- 5. VR80 Shotgun California Legal semiautomatic shotgun, Tibbs Motion discussion; presented at the Northern California Firearms Study Group Meeting, Sacramento Co. Crime Lab, Sacramento CA, Nov. 19<sup>th</sup>, 2019.
- 6. Get the Blood Out! Cleaning Bloody Bullets, presented at the Northern California Firearms Study Group Meeting, CCI Lab, Sacramento, CA Sept. 18<sup>th,</sup> 2018.
- 7. Quantofix Nitrite Sheets, presented at the Northern California Firearms Study Group Meeting, CCI Lab, Sacramento, CA Sept. 18<sup>th,</sup> 2018.
- 8. Ghost Glocks, Presented at AFTE 2018 meeting BYOS session, Charleston, WV, June 4<sup>th</sup>, 2018.
- 9. Taurus PT99AF Project, presented at the Northern California Firearms Study Group Meeting, Santa Clara Co. Crime Lab, April 6<sup>th</sup>, 2017.
- 10. Evofinder Research, presented at the Northern California Firearms Study Group Meeting, CCI Lab, Sacramento, CA May 14, 2015.
- 11. Evofinder Update: How it compares to other ballistic imaging systems. Presented at the Southern California Firearms Study Group Meeting, Orange County Crime Lab, Sept. 18, 2014.
- 12. Leica Scanner SIR Workshop, with Tony Grissom and Mike Haag, 8 hour workshop presented at the AFTE meeting, Albuquerque, NM, June 23, 2013.
- 13. Bullet Path Reconstruction: Accuracy, Precision, and Error Rates, presented at the AFTE Meeting, Albuquerque, NM June 6, 2013.
- 14. Bullet Path Reconstruction: Results of 7 Years of Research, presented at the CAC Northern California Firearms Study Group Meeting, Hayward, CA on May 31, 2012.
- 15. Bullet Path Reconstruction: Accuracy, Precision, and Error Rates, presented at the CAC Meeting, Bakersfield, CA, May 11, 2012.
- 16. Bullet Path Reconstruction: Results of 7 Years of Research, presented at the CAC Meeting, Bakersfield, CA, May 10, 2012.
- 17. Shooting Reconstruction for Crime Scene Responders, with Bruce Moran (Sacramento Co. District Attorney's Crime Lab), Workshop presented at CAC Meeting, Sacramento CA, October 21, 2008.

- 18. A Bullet to Cartridge Case Identification, presented at the Northern California Firearms Study Group Meeting in Davis, CA, Sept. 17, 2008.
- 19. Special Threats: The Winchester 9mm 127 grain SXT +P+, presented at the Northern California Firearms Study Group Meeting in Martinez, CA, Sept. 20, 2007.
- 20. Ballistic Vest Testing, presented at the Northern California Firearms Study Group Meeting in Ripon CA, Jan 25, 2007.
- 21. A Glock Malfunction presented at the Northern California Firearms Study Group Meeting in Ripon CA, Jan 25, 2007.
- 22. Shooting Reconstruction for Crime Scene Responders, with Bruce Moran (Sacramento Co. District Attorney's Crime Lab), Workshop presented at CAC/FSS Joint Meeting, Concord, CA, May 9, 2006.
- 23. The FN FiveSeven pistol versus a ballistic vest, presented at the Northern California Firearms Study Group Meeting in Hayward CA, July 14, 2005.
- 24. Barrel Casting; Evaluation of Forensic Sil, presented at AFTE Meeting in Indianapolis, Indiana, June 23, 2005.
- 25. *The California "Assault Weapons" Ban*, article published in Behind Locked Doors, Official publication of the California Association for Property and Evidence, February 2000 Vol.1, pg. 12-15.
- 26. Cleaning Bloody Bullets with Haemo-sol™, presented at the 3<sup>rd</sup> Annual IBIS International Users Group Meeting, Portland, Oregon, April 29, 1998.

## TEACHING EXPERIENCE

Firearms Examinations: What Forensics Can Do For You, Presented to the Monterey County Public Defender's Office, Monterey CA, November, 19<sup>th</sup> 2018

Firearms Examinations: What Forensics Can Do For You, Presented to the Stanislaus County Public Defender's Office, Modesto CA, June, 21st 2018

Shooting Incident Reconstruction, with Bruce Moran (Sacramento Co. DA's Crime Lab), 40 hour class presented at Contra Costa Office of the Sheriff Range in association with the California Criminalistics Institute, Oct. 2-6, 2017, April 27-May 1, 2015; June 3-7, 2013; Oct. 17-21, 2011; Sept. 20-24, 2010; May 18-22, 2009; July 7-11, 2008;

LD 40 Weapons Violations, Contra Costa Office of the Sheriff Law Enforcement Academy, Class 169, Dec. 10, 2015; Class 174, July 23, 2015; Class 173, February 6, 2015; Class 172, September 18, 2014; Class 171, June 12, 2014; Class 170, February 20, 2014; Class 169, November 13, 2013; Class 168, June 11, 2013; Class 167, December 7, 2012; Class 166, June 6, 2012; Class, June 15, 2011; Class 165, January 1, 2010; and Class 164, July 22, 2009.

Special Issues in Forensic Firearms Identification, 16-hour Workshop presented at the Fall CAC Seminar in Rohnert Park, CA Oct. 20-21<sup>st</sup>, 2014

The Science of Gunfighting: Firearms Instructor Course (POST certified), Contra Costa Office of the Sheriff Range, Sept. 29 - Oct. 2, 2014; May 6 - 9, 2013; Oct. 29 - Nov. 1, 2012; Aug. 30, 2010

Laser Scanning for Bullet Path Reconstruction: Accuracy, Precision, and Error Rates, Presented with Tony Grissim from Leica, San Jose SO Range, Sept 21, 2013.

Knobs, Knurls, and Eight Different Directions: Firearms Safety, California Association of Property and Evidence, Annual Seminar Conference meeting, Monterey CA, February 5, 3015, July 18, 2013, February 10, 2011, March 6, 2008.

Knobs, Knurls, and Eight Different Directions: Firearms Safety, Contra Costa Office of the Sheriff Law Enforcement Academy, Class 166, June 16, 2011; Class 165, Jan 4, 2010; Class 164, July 23, 2009; Class 163, February 12, 2009; Class 162, August 14, 2008; Class 161, March 13, 2008; Class 160, October 4, 2007; Class 159, April 5, 2007; Class 158, Oct. 5, 2006.

Machinegun Design and Modification Workshop, CAC Workshop, Santa Clara County Crime Lab, October 26, 2009 (Instructor and Rangemaster for live fire).

Firearms Safety (in association with DOJ/CCI), Contra Costa Sheriff's Range, Nov. 3-5, 2009; April 1-3, 2009; April 22-24, 2008.

Basic Firearms Evidence and Examination, Contra Costa County DA's Office Occasional Training Seminar in Napa, Feb. 3, 2007.

Basic Firearms Safety, Function Testing, and Make and Model Determination Training, Laboratory Aide Donnie Finley, Contra Costa County Crime Laboratory, Nov. 2004.

Bullet Path Reconstruction Training, Several members of the Laboratory Staff and other Law Enforcement agencies in our County, Contra Costa County Crime Laboratory, Aug. 2004

Firearms Safety Training, Several members of the Laboratory Staff, Contra Costa County Crime Laboratory, July 2004.

Make and Model Determination Training, Laboratory Aide Terence Wong, Contra Cost County Crime Laboratory, Jan. 2004.

Shooting Scene Documentation Training, Vallejo PD, Contra Costa County Crime Laboratory, May 2003.

Firearms Function Training, Criminalist Eric Collins, Contra Cost County Crime Laboratory, Dec. 2002.

Make and Model Determination Training, Criminalist Eric Collins, Contra Cost County Crime Laboratory, Oct. 2002.

Basic Firearms Safety and Function Testing, Criminalist Eric Collins, Laboratory Aides Leah Priest and Terence Wong, Contra Costa County Crime Laboratory, Sept. to Oct. 2002.

Basic Firearms Evidence and Examination, San Jose Police Department, March 28, 2001.

Basic Firearms Examination, West Valley College Administration of Justice students, April 12, 1999.

Basic Firearms Safety and Function Testing, Criminalists Eric Barloewen and Rhonda Weiss, Santa Clara County Crime Laboratory, Jan. 11 to Feb. 25 1999. (Ongoing training with Criminalist Barloewen until Sept. 2001).

Basic Firearms Evidence and Examination Class, Santa Clara County Public Defender's Office, Sept. 29 and Oct. 6, 1998.

Basic Firearms Evidence and Examination, Santa Clara County District Attorney's Office, Sept. 4, 1997; and March 24, 1998.

Certified armorer in the following: Colt 1911, Smith & Wesson Pistol/Revolver, H&K USP, Savage bolt action rifle, AR-15/M-16/M-4, Remington 870, Remington 700, Sig Sauer Pistol, Glock, Hi-Point, Springfield Armory M1A and 1911 armorer.

### **AWARDS**

Officer of the Month, Contra Costa Office of the Sheriff, Forensic Services, May 2013.

Officer of the Month, Contra Costa Office of the Sheriff, Forensic Services, Sept. 2004.

Officer of the Year, Contra Costa Office of the Sheriff, Forensic Services, 2003.

Commendation from Mayor Hammer, San Jose, CA, December 1998.