

Expert Witness Testimony Center & Crime Scene Laboratory Cedar Crest College, Allentown, PA



Reconstructing Scenes Involving Bloodshed 1-Day Training (Wed, Oct 29, 2025, 9am – 4pm, No Cost!)

The best approach to understanding events that did or did not occur at a scene involving bloodshed is to process every scene with a bottom-up mindset rather than a top-down approach where only one theory is pursued (e.g. a particular weapon was used, events occurred a certain way, scene is a suicide, etc.). In other words, initial focus should be on proper documentation, collection, being open-minded to multiple theories, and eventually allowing evidence to test the theories to determine the best explanation of events. To ensure we provide our best for every case, it is essential that all involved from the initial scene processing through to the courtroom understand what is needed by each person in the entire investigation process to best perform their task. For example, when those involved in initially processing scenes have an understanding of what, when, and how information is used by bloodstain pattern analysts, more information regarding the reconstruction of events during bloodshed is often possible.

This 1-day workshop will provide attendees with information on best practices for responding/processing/ investigating scenes involving blood and what/how information is utilized by bloodstain pattern analysts to reconstruct bloodshedding scenes. Attendees will gain an understanding of the what, who, when, and how of bloodstain pattern analysis (BPA), the assumptions and limitations of BPA, and receive introductory training in BPA to better understand what to collect at scenes/when to contact a bloodstain pattern expert. Multiple case studies (homicides, suicides, staged scenes, etc.) will be examined from the perspective of initial processing/investigation through to the resulting bloodstain pattern reconstruction. Attorneys will benefit from this training as they will gain a better understanding of the best practice methodology used by bloodstain pattern analysts, how bloodstain patterns are used to understand bloodshedding events, and the limitations that can occur when reconstructing bloodshedding scenes.

Who Should Attend: Law Enforcement (all ranks), Coroners/Medical Examiners, Attorneys, Death Investigators, Forensic Pathologists, Forensic Nurses, EMTs, Corrections Officers, Forensic Scientists

Where: Expert Witness Testimony Center & Crime Scene Lab

Cedar Crest College, Curtis Hall, 100 College Drive, Allentown, Pennsylvania, 18104

FEE: There is no charge for this workshop!

CEU Approval: Currently seeking CEU approval from various certifying bodies.

Registration Process: Email Dr. Joseph Cordoma, EWTC & CSL Manager

Joseph.Cordoma@cedarcrest.edu

Lodging: Holiday Inn Allentown – Bethlehem by IHG, 4325 Hamilton Blvd., Allentown, PA 18103
866-994-7255

Course Agenda (Wed, Oct 29, 2025):

9am – 11:30am	Reconstructing Scenes Involving Bloodshed
11:30am – 12:30pm	Lunch Break
12:30pm – 2pm	Processing/Investigating Scenes Involving Bloodshed
2pm – 4pm	Bloodstain Pattern Reconstruction Case Studies

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Course Objectives:

1. Understand what bloodstain pattern analysis is and how it is used.
2. Understand assumptions and limitations of reconstructing scenes involving bloodshed.
3. Receive introductory bloodstain pattern training to better understand when to contact a BPA practitioner.
4. Understand best practices (order of obtained information) of a BPA practitioner to mitigate bias when reconstructing scenes.
5. Understand how autopsy, crime laboratory, and investigator reports are utilized by BPA practitioners.
6. Recognize that early investigation theories can limit bloodstain pattern reconstruction.
7. Learn ways to mitigate early investigation theory bias.
8. Receive recommendations for best practices for both LE and coroners/medical examiners when processing bloodshedding scenes resulting in less reconstruction limitations.
9. Recognize that additional experts (e.g. forensic engineers) may be needed to better understand bloodshedding events.

Instructor Bio:



Carol J. Ritter, M.S., ABC-GKE

Senior Instructor, Cedar Crest College, Department of Forensic Science & Justice Studies

Assistant Director, Expert Witness Testimony Center & Crime Scene Laboratory

Forensic Consultant, Ritter Forensic Consulting

Carol Ritter began her career in 1997 as a forensic scientist with the Pennsylvania State Police (PSP) Crime Laboratory, where she analyzed controlled drug substances, burglary, sexual assault, and homicide cases and utilized bloodstain patterns to reconstruct crime scenes both on scene and from photographs. She is certified by the American Board of Criminalistics, a member of the American Academy of Forensic Sciences, and court qualified greater than 50 times at both the state and federal levels in areas of bloodstain pattern reconstruction, drug analysis, body fluid identification, and hair identification. She also served for 4 years as the technical coordinator for the PSP lab serology section, where she annually audited 6 state labs, trained new forensic scientists, and provided training to local and state law enforcement agencies in evidence collection and bloodstain pattern reconstruction. In 2017, she retired with 20 years of service to PSP and joined Cedar Crest College where she currently mentors research students and teaches undergraduate and graduate forensic science courses/laboratories in forensic pattern analysis, crime scene reconstruction, and DNA analysis. Ms. Ritter's research focuses on forensic pattern analysis including bloodstain patterns, firearm related patterns, as well as DNA analysis.

In 2020, Ms. Ritter established a consulting practice where she currently analyzes cases nationwide involving bloodshed for the purposes of crime scene reconstruction.

Contact the course instructor (cjritter@cedarcrest.edu) with any course-related questions.