Virginia Department of Forensic Science (DFS) Annual Retraining Seminar - 2023 14 Hours

Course Content:

Enhancing Criminal Investigations with iPads

- Combining advanced tools with basic methods like Photos, Notes, and Sketches to ensure a thorough and accurate investigation.
- Accessing case files, databases, and evidence on the go is convenient in the investigative process and enhancing overall efficiency.
- Digital note-taking allows the Investigator to gain organization and the ability to generate searchable text and audio recordings.
- The iPad serves as a reliable device for capturing high-quality photos, videos, and audio recordings at crime scenes.
- The Investigator can share and access case files, facilitating real-time collaboration even while on the scene.
- Virtual meetings can be conducted, allowing for effective discussions and decision-making.
- The Investigator benefits from a wide range of apps, enabling advanced data analysis with tools such as charting and crime mapping functionalities.

Forensic Biology:

- 1. Review of current forensic biology testing/technology
- 2. Discussion (advantages and disadvantages) of additional techniques in the forensic biology community
 - a. mVAC
 - b. Phenotyping and investigative genetic genotyping
 - c. Rapid DNA
- 3. Testimony challenges received by forensic biologists
- 4. podcast mentioning DFS (paraphrase Linda's statement)
- 5. Updates and reminders
 - a. Backlog/case transfers
 - b. Status of PERK testing project (and evidence return)
 - c. Recruitment
 - d. Court dates and statuses (esp. juvenile)
 - e. Presubmission consults

Laboratory Updates:

- Review of backlogs and case turnaround times for all sections, including breath alcohol
- Agency updates

- o Central Laboratory capital project
- Review of newer DFS policy notices
 - Forensic Biology case transfers
 - o Packaging of powdered controlled substances
- Discussion of marijuana testing capabilities and submission guidelines
- Toxicology Plan for increased THC testing
- Update Evidence Receiving Protocols and Prelog
- Update on PERK Tracking system
- Update on DNA Data Bank Sample Tracking System (DBSATS)

Search & Rescue K9s

- -Types of SAR resources
 - HRD, Live find, water recovery, disaster, and a discussion on the overview/capabilities of each
- -HRD K9's
 - how they work, chemistry/science behind what they do, VOC's
 - how HRD K9s' are trained body farm, green cemetery, training aids
- -HRD Case Studies
- -recoveries, missing subjects and how the dogs are equally as important in locating a subject as they are telling us where there are NOT

Writing the Crime Scene Investigation Report

A Crime Scene (Investigation) report is the official means for communicating the details of forensic investigative efforts supporting an agency's overall investigation into an event. Crime Scene (Investigation) reports are typically considered to be 'business records' prepared to create a permanent record of the CSI's observations, evidence collected, reconstruction efforts and actions taken to complete the forensic investigation. The Crime Scene (Investigation) report must be Concise, Accurate, Objective and Complete. Choices in the format and structure of the CSI report can greatly assist the target audience (detectives/investigators, command personnel, prosecutors, medical examiner/scientists) in more easily locating key information concerning the scene, the evidence, and action taken to process the scene.

Legal Update

Presentation and discussion of court decisions from the past year that directly affect the laws of Search & Seizure

Forensic Science Academy Graduate Creative Crime Scene Processing

Oftentimes, crime scene personnel will display outside the box thinking and innovation in cases that do not necessarily warrant construction of an entire case stud. Because of this, many times these ideas do not get shared with a large audience. This presentation will highlight several of these examples of creativity on the scene for others to learn from.

Training Section Updates:

- Forensic Science Academy
- 2023 courses
- OSAC Standard for Scene Documentation Procedures

• OSAC Standard for Diagramming Scenes

Missing Person / Homicide Case Study

We will be presenting the Alexis Murphy case. Alexis was a seventeen-year-old who went missing in August 2013 and shortly after Randy Taylor was charged with her abduction and murder. Ultimately, Taylor was convicted of those crimes. The presentation will cover the highlights of the investigation covering the evidence used to convict Taylor. The evidence which will be discussed during the presentation includes:

- Phone location data
- Search warrants which recovered biological evidence
- Security camera video
- Interviews with Taylor
- The search which recovered Alexis' remains

The presentation will show what worked to construct a convincing homicide narrative from available evidence that compelled a jury to convict. The presentation uses case photographs, security camera video, and clips from interviews with a juror, family members, and Taylor.