

**KEEPING TRACE EVIDENCE VIABLE-  
BOTH SIDES OF THE EVIDENCE:  
COLLECTING YOURSELF OR HAVING IT  
BROUGHT TO YOU**

**FAYE SPRINGER  
CRIMINALIST IV  
SACRAMENTO COUNTY DISTRICT ATTORNEY'S  
OFFICE  
LABORATORY OF FORENSIC SERVICES**

# **USES OF PHYSICAL EVIDENCE - GENERAL**

- **To establish**
  - **Ownership/possession/association of item to suspect/victim**
  - **If used in or present at this crime**
  - **If used in a particular manner**

# **USES OF PHYSICAL EVIDENCE - GENERAL**

- **Important to understand the issues or questions that can be addressed by any piece of evidence recovered in a particular case**
- **Consider all potential information derived from an item of evidence**
  - **Trace**
  - **DNA**
  - **Fingerprints**
  - **GSR/ firearms information**
  - **Reconstructive information**

# **USES OF PHYSICAL EVIDENCE - GENERAL**

- **WHAT question are you attempting to answering with any given analysis?**
- **WHO is making the decisions on how best to answer these questions?**

# WHAT IS THE QUESTION?

- **Now - immediate issues**
- **Later – Anticipated issues**
- **Who is asking the questions??**
  - **An attorney**
  - **An investigator**
  - **Anyone? Or are we just doing busy work?**

# WHO MAKES THE DECISIONS

**In my office, often requests for analysis is made most frequently by a**

- District Attorney**
- Detective**
- Crime Scene Investigator**
- Supervising Criminalist after discussion with an attorney/investigator**
- Scene Criminalist**

# WHO MAKES THE DECISIONS

- **Often the requests read**
  - **Analyze kit for GSR**
  - **Compare the glass in the shoe to the glass from the scene**
  - **Do DNA on the hairs recovered at the scene**
- **Do you ever question whether this analysis actually answers any relevant question in case?**

# IN MY OPINION

**The most effective means to address issues or questions in a case thru the use of physical evidence is**

- **To have a Criminalist respond to a crime scene. That Criminalist then**
  - **has the duty to manage the physical evidence to decide what needs to be examined to best answer questions**
  - **ensure that the essential evidence is to be processed promptly**
  - **ensure the processing of the evidence is done in the proper order.**
- **To obtain input of investigators and possibly the district attorney in regards to how much analysis is needed to file charges**
- **And later, to consult with the attorney to decide what evidence can be used to address any specific issues that have arisen in the case**

# **ADVANTAGES TO BEING AT THE SCENE**

- **Understand the issues and questions that need to be answer**
- **Can make better decisions as to what should be done on any item of evidence**
- **Give investigators an immediate contact person in the laboratory**
- **The Crime Scene Criminalist has immediate case work responsibility for the processing evidence or getting the evidence to the appropriate analysts**
- **The Criminalist has more influence on the progression of the case**

# **DISADVANTAGES TO BEING AT THE SCENE**

- **Costly**
- **Time away from the bench**
- **Additional broad based training and experience required to an effective Crime Scene Criminalist**

# **CONTRACT CASE FROM OUTSIDE AGENCY**

- **What is the question???**
- **Who is making the decision as to what to analyze?**
  - **Whoever is paying the bill**
    - **Prosecutor**
    - **Investigating Agency**
    - **Another laboratory**

# **CONTRACT CASE FROM OUTSIDE AGENCY**

- **Advantages my laboratory sees in providing casework to other agencies**
  - **Provides funding**
  - **Keeping expensive instrumentation functioning on a routine basis for casework**
  - **Provides more training and experience to analysts providing the service**

# **CONTRACT CASE FROM OUTSIDE AGENCY**

- **Disadvantages**
  - **Sometimes no contextual information provided**
  - **Do not know if your examination answers the relevant question in the case**
  - **Perpetuates a lack of knowledge of the value of trace evidence in these service areas because it has no spokesperson**
  - **Promotes an attitude of willing to pay – willing to do**

# **EXAMPLE CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **Homicide where the suspect shot and killed the victim**
- **A witness sees an individual running down the street drop an object into a dumpster.**
- **The witness looks into the dumpster, sees a gun, and subsequently calls the police.**
- **Discarded outer clothing is found in a shed a short distance where the shooting occurred.**
- **The witness thinks she recognized the runner and a suspect is arrested the next day.**

# **CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **A Criminalist was called to the crime scene and assisted in the recognition and collection of evidence**
- **The potential evidential issues to be addressed by examination of the gun in the dumpster are**
  - **Is this the murder weapon?**
  - **Does it belong to the suspect?**
  - **Did the suspect actually shoot the gun?**
- **The Criminalist determined the order of processing of evidence from the gun**



# **CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **The obvious questions to be immediately addressed are**
  - **Is it the murder weapon? Examination of fatal bullet and comparison by a firearms examiner to the gun**
  - **Does it belong to the suspect?**
    - **fingerprints**
    - **contact DNA,**
    - **trace evidence,**
    - **possible registration,**
    - **photographs show suspect with gun**
    - **manuals or associated accessories**
    - **witness statement or other investigative information**
  - **Did the suspect actually shot the gun?**
    - **GSR on clothing in shed compared to GSR expected from the ammunition or gun used in case**
    - **Associate gun to clothing by fiber analysis**
    - **Associate clothing in shed to suspect with DNA analysis**

# **CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **Criminalist at scene determined the best order of processing for the greatest potential to develop information to be**
  - **Examination for trace evidence**
  - **Contact DNA sampling from surfaces of gun not suitable for fingerprint**
  - **Fingerprinting**
  - **Additional contact DNA sampling if necessary after fingerprinting**
  - **Firearms examination**

# **CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **A similar exercise would be done with the discarded clothing**
  - **Does the clothing belong to the suspect?**
  - **Was it worn at the time of the homicide?**

# **CRIME SCENE WITH CRIMINALIST IN ATTENDANCE**

- **If no Criminalist had been at the scene would the evidence been processed in this manner?**
- **????**

## **EXAMPLE 2**

### **CONTRACT CASE FROM OUTSIDE AGENCY**

- A decomposed victim found in his vehicle tape around his wrists and around the upper portion of his shirt**
- Tape collected from body by pathologist**
- Several rolls of tape were collected from suspect's residence**
- Request is to compare that tape from the body to the tape from the suspect's residence**

# CONTRACT CASE FROM OUTSIDE AGENCY





# **CONTRACT CASE FROM OUTSIDE AGENCY**

- **Do I proceed with the tape analysis assuming that the blood stain or any trace evidence on this roll is not important**
- **Contacting submitting agency to inquire about significance of these observations results in**
  - **Expending more time than initially estimated**
  - **Delay in analysis**
  - **Creating more work for yourself**
  - **Problem finding someone that knows enough about the case to make an informed decision**
  - **At this point in the case, one may not be able to obtain adequate reference materials to pursue other evidence**

# **CONTRACT CASE FROM OUTSIDE AGENCY**

- **Ultimately, the REAL question in this case was whether or not the tape covered originally covered the victim's mouth and nose causing his death.**
- **The prosecutor's theory of the case was that victim suffocated as a result of the application of tape over the nose and mouth of the victim.**
- **The defendants admitted to taping the victim's hands and chest and to putting him in the car, but claimed that he was alive when they left him. They also claimed that he later died of a heart attack.**

# CONCLUSIONS

- **As we become more and more specialized, many Criminalists lack the broad based knowledge required to recognize evidence at a crime scene, and process or analyzed it in the manner most likely to develop the best information for the case.**
- **Fewer and fewer laboratories in my area are doing trace evidence, leading to underutilization. Underutilization leads to lack of knowledge of its existence by our client agencies.**

# CONCLUSIONS

- **If trace evidence is destined to be sent to regional centers for the analysis, then**
  - **A trained Criminalist (the Generalist?) from the submitting agency's service laboratory needs to act as the case manager**
  - **Extensive training must be given to detectives, crime scene investigators, and attorneys from the submitting agency on how best to utilize trace evidence**
  - **There must be adequate funding for trace evidence analysis of the center to provide the best possible product**

# **Keeping Trace Evidence Viable - The Fight for Survival**

- **It is time to rethink how we do business**
- **It is time to rethink how we do training**
  - **Criminalists or Forensic Scientists**
  - **Investigators & CSI**
  - **Attorneys**
- **We need to aggressively market trace evidence services**
- **If not, contact DNA will become the new trace evidence.**

**THE END**

