



F40 Problems and Possibilities With Foreign DNA in a Capital Post-Conviction Defense Investigation

Matilde J. Carbia, JD, New Orleans, LA 70112; Kevin Riach, JD*, Fredrikson & Byron, PA, Minneapolis, MN 55402*

Learning Overview: After attending this presentation, attendees will understand creative solutions to the problems inherent in developing foreign DNA evidence in post-conviction, including: (1) resistance by the state and the courts to further development of old forensic evidence, (2) the need to use outdated or obsolete technologies to process newly collected forensic evidence to compare profiles developed in decades-old crimes, (3) the limitations of current technologies to process degraded forensic evidence, and (4) the practical challenges of incorporating newly processed and newly discovered forensic evidence in a post-conviction case.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by helping attendees gain insight into the obstacles defense counsel faces when confronted with cold case DNA evidence and limited avenues for developing new forensic information, as well as practical solutions to these problems.

This presentation recently used the DNA profile developed from blood found at the scene of a 20-year-old quadruple homicide to connect an alternative suspect to the crime. In 1996, the state developed a profile from blood found on a red jacket left hanging at the crime scene that did not match the victims or the defendant. The profile was developed using the now-outdated DQ Alpha and Polymarker DNA technologies. Post-conviction counsel filed a motion for additional testing, based in part on this previously unidentified sample, which was opposed by the state and denied by the court. Years later, post-conviction counsel obtained DNA from an alternate suspect and located a lab that could still perform DQ Alpha and Polymarker DNA testing. That lab developed a profile from the newly collected sample that is the same as the previously unknown profile on the red jacket. This evidence was used to support a testing motion that led to the examination and testing of multiple items from the crime scene, the development of 24-plex Short Tandem Repeat (STR) and Y-Filer® profiles that confirmed the DQ Alpha and Polymarker testing and the development of additional evidence that was used in post-conviction.

This presentation will include discussion of the lessons learned from this experience. This presentation will discuss finding a qualified DNA lab that can apply outdated technologies to newly discovered evidence and how to develop new forensic evidence from old and degraded samples to advance your case, including the limits of the new technologies. This presentation will suggest strategies to strengthen post-conviction testing motions including the use of bloodstain pattern analysis to inform testing decisions and support the significance of DNA analysis.

Investigation, DNA, Defense