

**TEAM OF FORENSIC EXPERTS AID INVESTIGATIONS THROUGH EXPEDITIOUS
RECOGNITION, COLLECTION, AND ANALYSIS OF DNA EVIDENCE**

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This poster presents a review of two cases where DNA results obtained from swabs taken by forensic personnel at the hospital and at the crime scene have led to suspect matches within days of the crimes. Through education, training, keen observation, and teamwork, forensic investigators recognized and collected potential evidence in unusual places.

A young woman was brutally attacked and raped in her own home one winter night. The “Bad Breath Rapist”, so called due to the fact that the victim identified the foul odor of his breath, not only left behind the classic clues (i.e. Semen) that usually leads to the DNA evidence that solves the typical sexual assault, but he also left a bite mark on the victims back. A highly trained Sexual Assault Nurse Examiner recognized the potential DNA evidence through the victim’s statement. The nurse was able to successfully swab the area, concentrating on maximizing the assailants DNA and minimizing the victim’s DNA. Investigator’s and hospital personnel narratives provided the information allowing forensic analysts to triage the sexual assault kit contents and prioritize the bite mark swab without spending valuable time on presumptive and confirmatory testing. Results yielded a full 13 loci major male profile leading to the arrest and arraignment of the “bad breathed” suspect within eight days of the brutal attack.

A pregnant gas station attendant was found strangled in the garage bay on a Saturday evening in the spring. The only evidence recovered at the scene was a black Velcro type strap found around the victim’s neck. Investigators determined the crime occurred within a twenty minute window. A highly trained forensic crime scene chemist recognized not only the possibility of finding trace DNA from the handler on the ends of the strap, but also the possibility of evidence on the body itself. The chemist also recognized that the individual who found the body and the emergency responders could have left ‘touch DNA’ and collected samples for elimination purposes. The chemist performed an examination of the body with an alternate light source and was able to identify areas of interest on the victim’s hands, ears, and stomach. Analysis of the ear samples determined amylase was present in large quantities (analyses pending). DNA analysis of the strap exhibited a mixture of DNA, including that of a major male. A match to the suspect was completed within days. Both of these cases are still pending trial.