



Solutions

Issue No. sol-041

Typical Forensic Biology Casework

Forensic casework is varied and investigative by nature. Accordingly, a standard approach is not always the best approach. Knowing the right questions to ask and how to utilize the answers to tailor the forensic examination is something only experience and expertise can provide.

Case Scenario #1

As a result of intoxication, a female complainant of a possible sexual assault had no recollection of what had occurred. Her clothing and a number of sexual assault evidence kit items were submitted to Maxxam Analytics Inc.

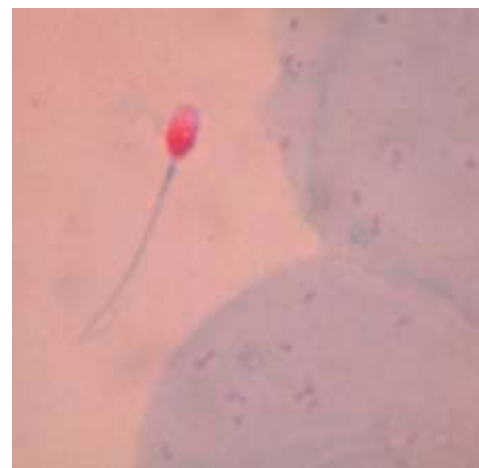
Semen was identified on a vaginal swab and was submitted for DNA analysis. The DNA profile obtained was a mixture from at least two males. Police had indicated that the complainant had not had consensual sexual intercourse within the three weeks prior to the alleged assault.

Maxxam Analytics Inc. discussed these results with the police agency and suggested that additional items should be examined in order to help separate the two male DNA profiles. After the analyses of additional items, two discernable male DNA profiles were developed and were uploaded to Canada's DNA Data Bank.

Police obtained discard samples from several suspects. The DNA profiles obtained from two of these men matched the DNA profiles from the evidence items. These two individuals were not the main suspects originally considered.

The Value-Added Service

Our staff will consult with police agencies in an ongoing manner to suggest additional examinations and needed analysis to obtain the best results. This two-way communication ensures that our client's needs and expectations are met.



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Case Scenario #2

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A female prostitute reported to police that she had been the victim of a recent sexual assault. Her clothing and items from a sexual assault evidence kit were submitted to Maxxam Analytics Inc.

In addition to the possibility of semen being reported, the case particulars suggested that the alleged perpetrator's saliva might also be present on some of these items. While no semen was identified following the examination of the complainant's vaginal swab and underwear, amylase, a constituent of saliva, was located in several different locations of the underwear. Examining the entire surface of the underwear and sampling of an area thought to be devoid of the complainant's DNA resulted in obtaining a single male DNA profile. This was suitable to be uploaded to Canada's DNA Data Bank.

This uploaded male DNA profile led police to a suspect through a DNA match. This was later verified through a match between a sample from the suspect and the amylase on the complainant's underwear.

The Value-Added Service

Our staff considers all aspects of a case. The most informative DNA profiles are often obtained as a result of our thoroughness in examinations and our expertise in sampling the right areas. This maximizes the number of DNA profiles suitable for entry onto the DNA Data Bank.



For more information about how we can help you with your forensic investigations and the services we offer, please contact Maxxam at:

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