UNUSUAL PARENTAGE AND HUMAN IDENTIFICATION CASES

Sudhir Sinha, Ph.D.

ReliaGene Technologies, Inc., New Orleans, LA

This presentation will familiarize the participants with unusual and interesting results encountered during casework sample analyses by our laboratory.

The first case that will be discussed is a criminal paternity case involving a mother, alleged father, and product of conception. A mixture of DNA in which the mother's DNA was the major component and the male fetus' profile was dropping out using Profiler Plus and COfiler systems. The Y-PlexTM 6 kit was used to determine if the tested man could be the father of the product of conception.

The second case involves a victim who was found strangled to death. The suspect, when arrested, had scratches on his face. Nuclear STR results on the fingernail scrapings showed several alleles consistent with the suspect but many alleles were below 75 RFU, producing inconclusive results. The fingernail scrapings were amplified using the Y-PlexTM 6 kit.

The third case will present a situation where Y-STR analysis resolved an inheritance case 50 years after the death of the accused father who had no known children and was a man of the cloth.

Several other interesting casework examples will be presented which include the Case of the Molar Pregnancy, the Case Study of 150 Year Old Mummified Bodies, and the Case of the Multi-Million Dollar Inheritance: Larry Hillblom, owner of DHL.