CALCULATING THE PATERNITY INDEX FOR LOCI WITH APPARENT MUTATIONS IN STR TESTING

George C. Maha, Lloyd C. Osborne, Gary M. Stuhlmiller and Cynthia Taves
Laboratory Corp or America

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Accreditation Standards require that when a mutation is observed that the results be reported and incorporated into any calculations. Currently there are a variety of approaches utilized by various laboratories to incorporate the mutation information. These include simply using the mutation rate as a paternity index or using some other set number, using the mutation rate as a transmission frequency in the paternity index formula, dividing the mutation rate by the average probability of exclusion, and formulas that try to take into account if the one or two repeat differences are present. This presentation compares the outcome of these methods in various cases.