Glossary

Abbreviations

ANOVA	Analysis of variance	A statistical method for comparing two or more averages.
CPI	Combined Probability of Inclusion	A genotype inference method that uses thresholds.
DAB	DNA Advisory Board	National group that develops DNA quality assurance standards.
DNA	Deoxyribonucleic acid	Genetic material contained in cells.
EPG	Electropherogram	Graphical representation of DNA fragments showing size and amount.
.fsa	Fragment analysis data file	Electronic file containing DNA sizing data from a sequencer.
KL	Kullback-Leibler statistic	The expected amount of information in a genotype.
log	logarithm	The factors of 10 in a number.
LR	Likelihood ratio	The weight of evidence comparing two alternative hypotheses.
MATLAB	Matrix laboratory	A numerical computing environment and programming language.
MCMC	Markov chain Monte Carlo	A computer sampling method that solves probability equations.
MVN	Multivariate normal	A multi-dimensional bell curve.
mCPI	Modified Combined Probability of Inclusion	CPI genotype inference using stochastic thresholds.
PCR	Polymerase chain reaction	A rapid way to generate very many copies of a DNA sequence.
rfu	Relative fluorescent units	The y-axis of an electropherogram that measures DNA quantity.
RMNE	Random Man Not Excluded	Another name for CPI.

sFTP	Secure file transfer protocol	A way of securely sending and receiving electronic files.
STR	Short tandem repeat	A short DNA sequence that is repeated in tandem.
SWGDAM	Scientific Working Group on DNA Analysis Methods	National group of forensic scientists that develops DNA guidelines.

Words

Allele	A number of repeat units at a STR locus.
Ban	A standard unit of information, in powers of 10.
Bayes	A way of updating probability based on data.
Genotype	A person's genetic type, as a pair of alleles.
Likelihood	How well a hypothesis explains the data.
Locus	A specific location on a chromosome.
Match	The event when two genotypes are the same.
Match statistic	The strength of match, relative to coincidence.
Posterior probability	The probability of a hypothesis after seeing data.
Precision	A measure of reproducibility.
Prior probability	The probability of a hypothesis before seeing data.
Probability	The degree of belief in a hypothesis.
Sensitivity	How well a correct result is found.
Specificity	How well an incorrect result is not found.
Standard deviation	A measure of variation about an average.