Bioinformation

The following notation will be used throughout. R denotes the real line, m denotes the number of tests (probes), and := indicates equal by definition. $I(\cdot)$ denotes the indicator function; it takes value 1 if the statement enclosed in the parentheses is true, 0 otherwise. Convergence and convergence in probability are denoted by $\rightarrow$ and $\rightarrow_p$ respectively. A random variable is usually denoted by an upper-case letter such as P, R, V, etc. A cumulative distribution function (cdf) is denoted by F, G or H; an empirical distribution function (EDF) is indicated by a tilde, e.g., $\widetilde{F}$. A population parameter is denoted by a lower-case Greek letter and a hat indicates an estimator of the parameter, e.g., $\hat{\theta}$. Asymptotic equivalence is denoted by $\cong$: $a_n \cong b_n$ as $n \rightarrow \infty$ means $\lim_{n \rightarrow \infty} a_n / b_n = 1$.