Genomics of nontuberculous mycobacteria

In addition to mutations, mycobacterial genomes also vary their content through mobile elements. Phages, plasmids and transposons introduce and remove genes each generation.

Mobile elements change the genes present and absent between individual bacteria; so the pan-genome includes the genes unique to an individual, genes found in some, and the core genes found in all bacteria within a species.

Pan-genome variation within a mycobacterial species shows that Hawai’i patient and environmental isolates have similar genes gained and lost.

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