



- In merozygote gene (allele) of exogenote may or may not substitute of alleles of endogenote.
- The process of replacement of one allele by different alleles from the same genes by preserving the structure of gene is termed as genetic recombination.
- Exogenote are normally degraded rapidly so that there is essentially a race between the process of degradation of the exogenote and recombination.

**\* Transformation**

**\* Griffith Experiment**

- In 1928, Griffith performed a transformation experiments with two different strains of the bacterium *Diplococcus pneumoniae* (now called as *Streptococcus pneumoniae*) virulent strain which vertebrates (such as mice, human) and avirulent strains which not cause pneumonia.
- The difference in virulence is related to the polysaccharide capsule of the bacterium.
- Virulent strains have this capsule while avirulent strains do not.
- The non-capsuled bacteria are readily engulfed and destroyed by phagocytic cell.