

★ Historical gene transfer and genetic Recombination

- * gene transfer refers to the movement of genetic information between organism.
- * gene transfer can be horizontal and vertical
- * Transfer of genes from parents to offspring is termed as vertical gene transfer whereas transfer of gene between two independent organism is called horizontal or lateral gene transfer

* Example of vertical gene transfer :

- i) Sexual reproduction in eukaryotes.
- ii) Binary fission in prokaryotes.

* Example of horizontal gene transfer :

- i) Transformation
- ii) Transduction
- iii) Conjugation