

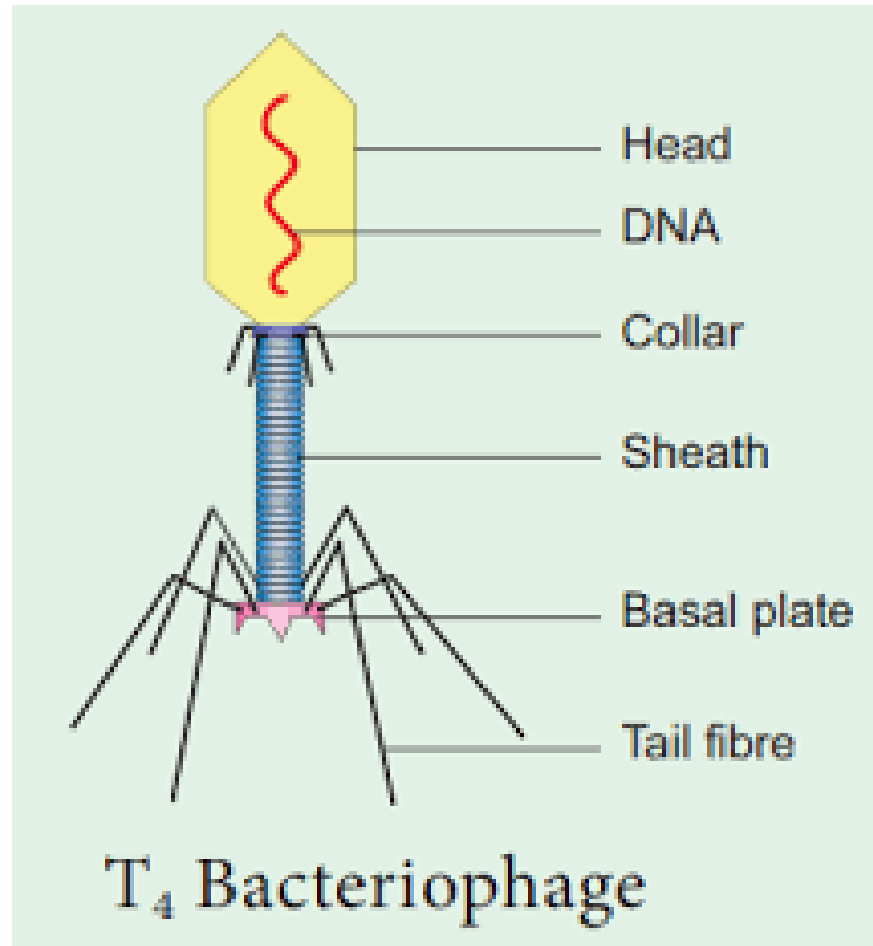
Bacteriophage

Dr Shilpa Kaistha

Department of Biosciences & Biotechnology

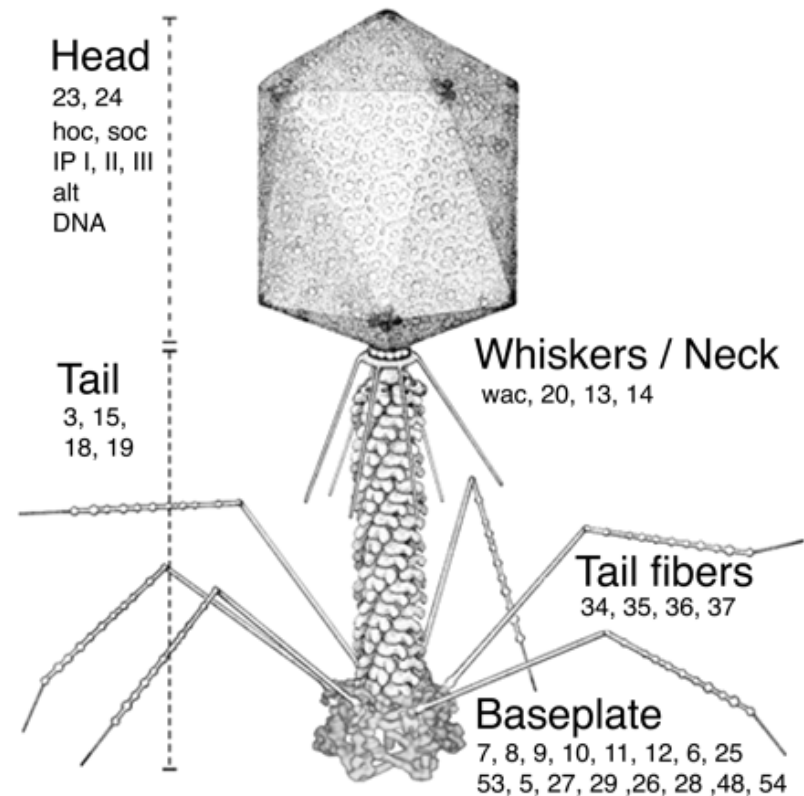
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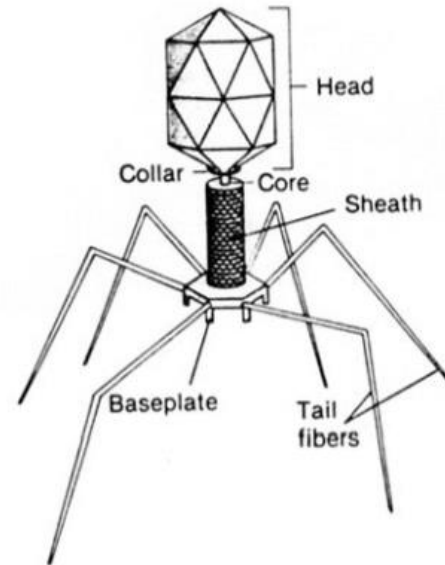
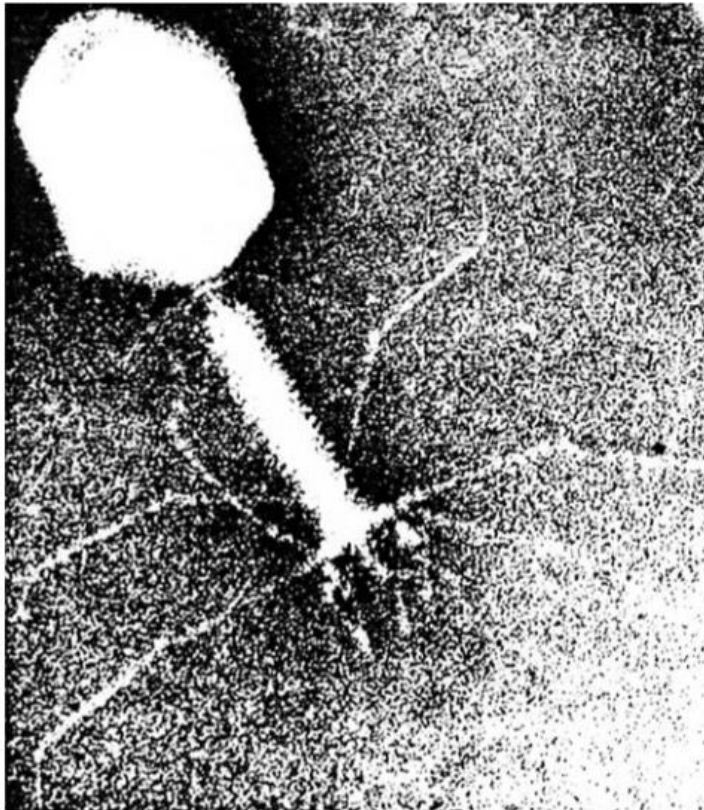
Bacteriophage: Complex symmetry



Bacteriophages: T4

- 90-200nm size
- Linear dsDNA - ~
- 168,903 base pairs and encodes about 300 gene products
- circular permuted
- terminally redundant

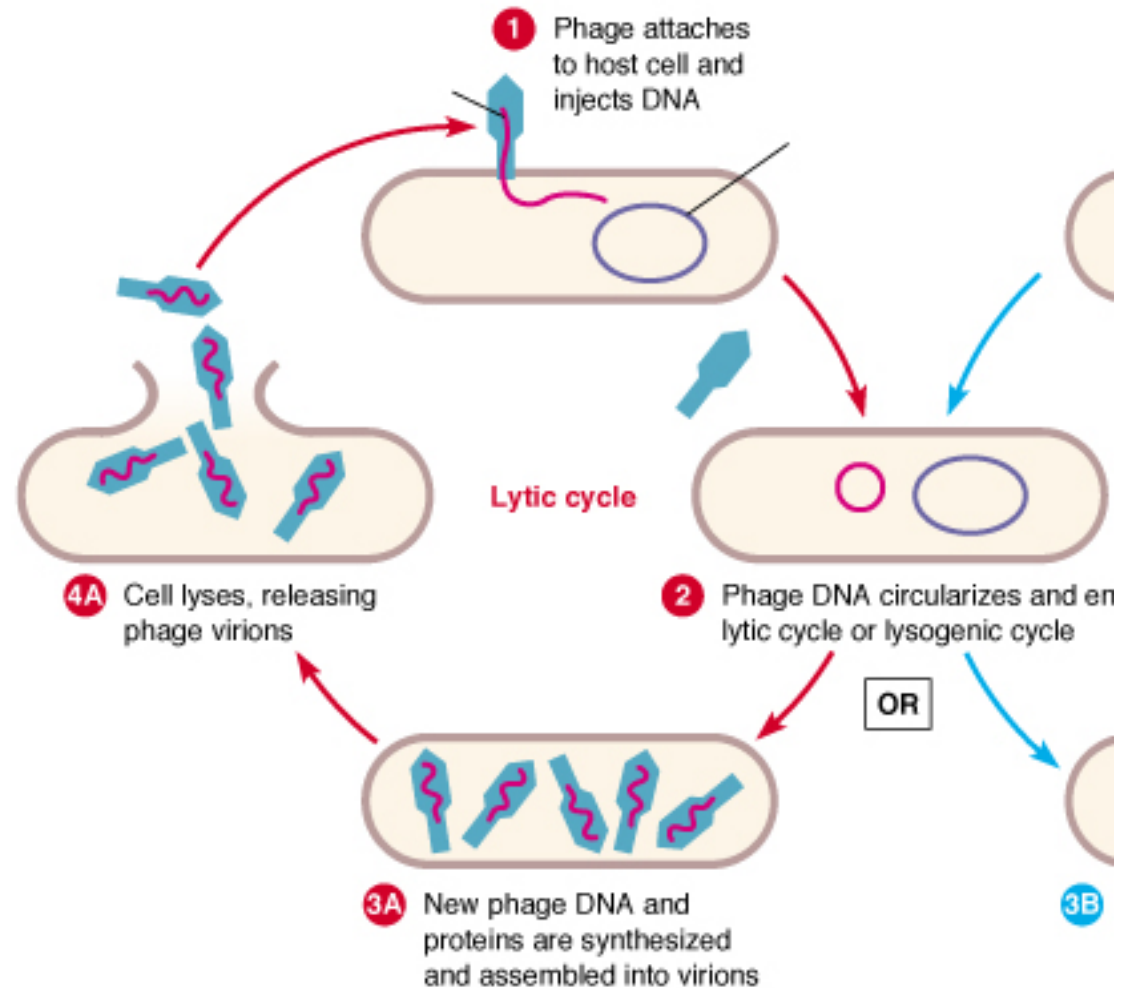




Left. Electron Micrograph of bacteriophage T4. Right. Model of phage T4. The phage possesses a genome of linear ds DNA contained within an icosahedral head. The tail consists of a hollow core through which the DN

Bacteriophage Life Cycle

- Lytic cycle
 - Attachment
 - Penetration
 - Biosynthesis
 - Maturation
 - Release



References

- https://en.wikipedia.org/wiki/Escherichia_virus_T4
- Todar online textbook of bacteriology
- Yap ML, Rossmann MG. Structure and function of bacteriophage T4. *Future Microbiol.* 2014;9(12):1319-1327. doi:10.2217/fmb.14.91