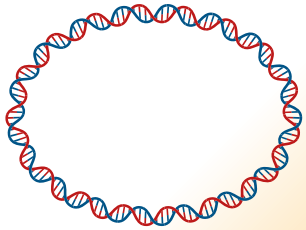
Genome Announcement: *Salmonella* Typhimurium

Accession#SRR23106259 (NCBI)
INS0000626 (INDA)

1. Genome Sequencing



BRIC-THSTI presenting the whole genome sequence of ***Salmonella* Typhimurium** isolated from the gall bladder tissue sample.

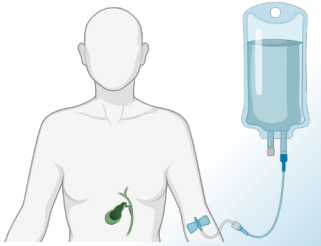
2. Analysis

This genomic analysis offers crucial information on high invasive index, horizontally aquired virulence functions in their accessory genomes.

3. Insights

The genomic insights describe the virulent genes in plasmids and in phage. SP-1-T3SS effector proteins play role in pathogenicity. Proinflammatory genes also present.

4. Translation



A molecular understanding of *S.* Typhimurium's genomic features will help to understand the microbial role for invasive gallbladder carcinogenesis.

Salmonella Typhimurium: A microbial patron in gallbladder carcinogenesis.

GOVERNMENT OF INDIA | MINISTRY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF BIOTECHNOLOGY

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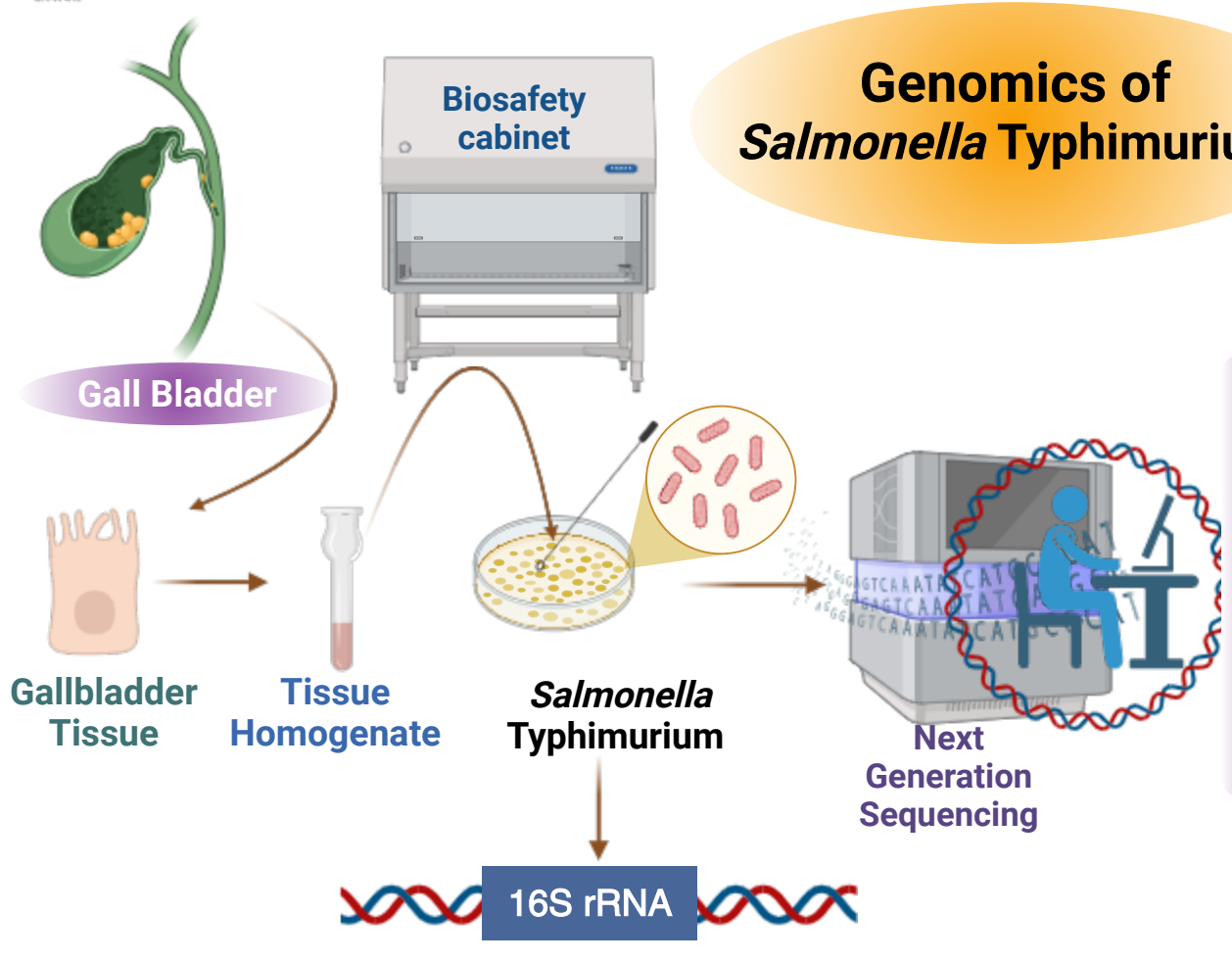
Genomics of *Salmonella* Typhimurium



Genome characteristics

- Genome size: 4.71 mb
- GC percent: 52.3%
- CDS: 3880
- Stable RNAs: 64
- Plasmid: Present

Important Functions

Virulent genes:

Fimbrial adherence determinants: *csg*, *bcf*

Non-fimbrial adherence determinants: *misL*, *ratB*

Pro-inflammatory genes:

sopE2, *sopB/sigD* and *sopA*