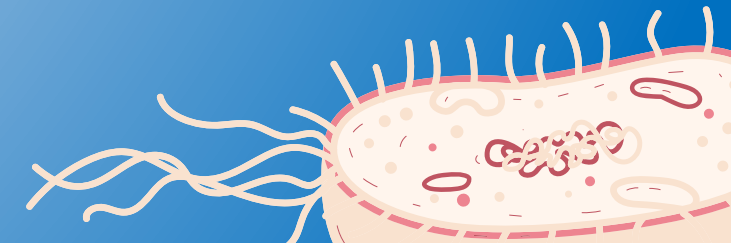
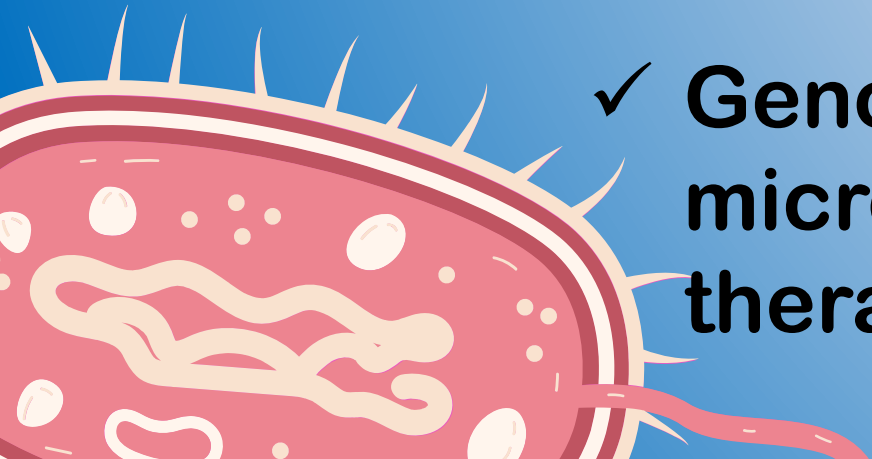
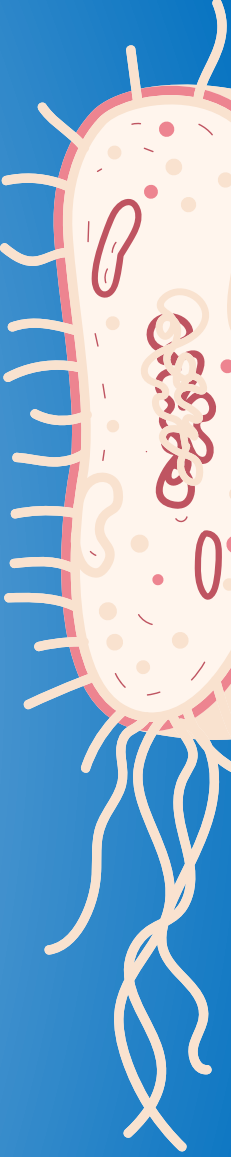
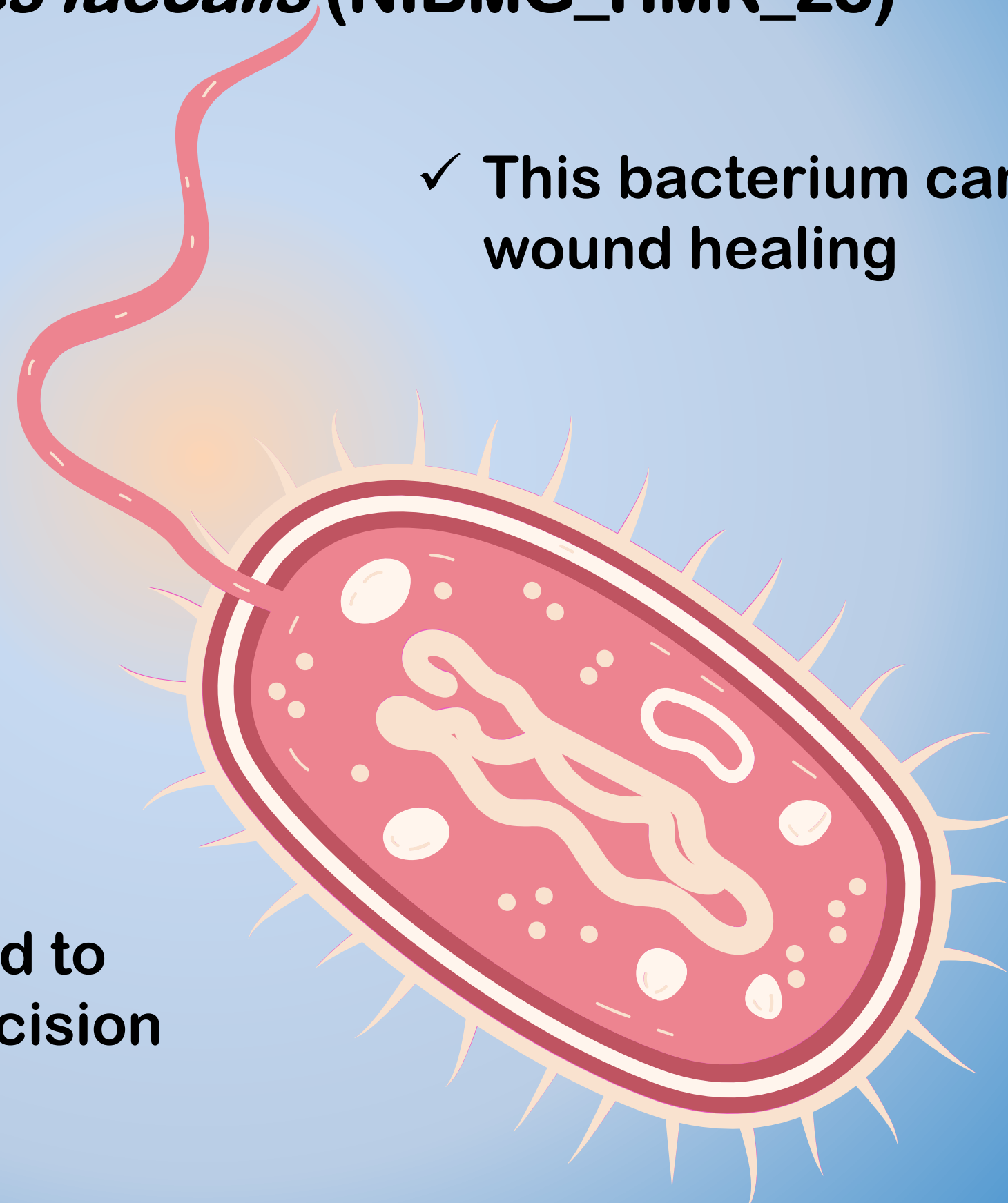
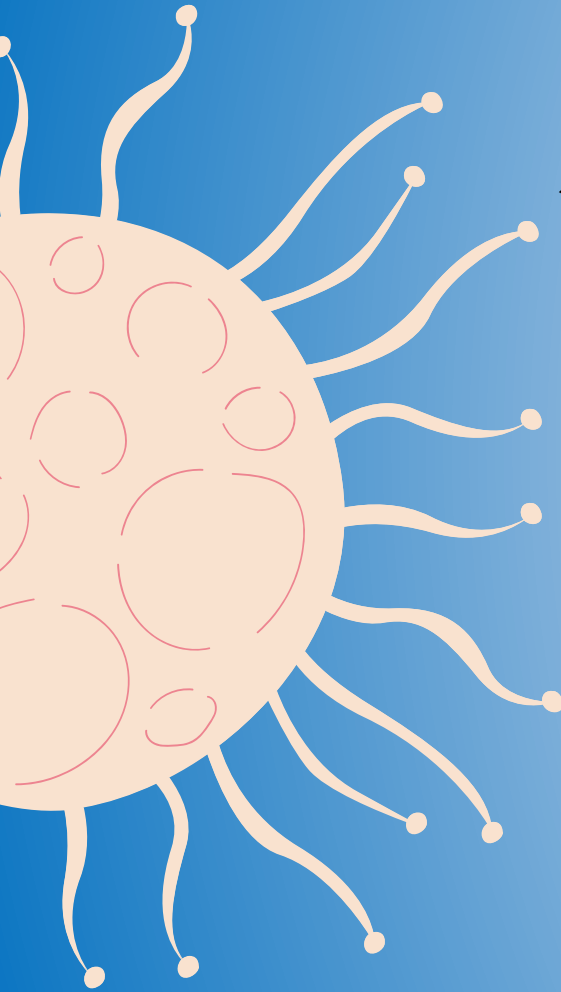




## *Alcaligenes faecalis* (NIBMG\_HMR\_28)

- ✓ Isolated from diabetic wound
- ✓ It can modulate the immune response for faster wound healing
- ✓ Outcompetes harmful pathogens
- ✓ Genomic study can lead to microbiome-based precision therapies

- ✓ This bacterium can promote wound healing



**Quality of Genome Assembly and Annotation:**  
Results from indigenously developed **BHARAT** analysis pipeline: (**B**acterial **H**ybrid genome **A**ssembly and **R**apid **A**nnotation **T**oolset)

Table 1: Assembly Details		Table 2: Annotated Genome Features	
Contigs	38	CDS	4,194
GC Content	56.50	tRNA	54
Contig L50	3	Repeat Regions	0
Genome length	4,410,203 bp	rRNA	2
Contig N50	766,408		

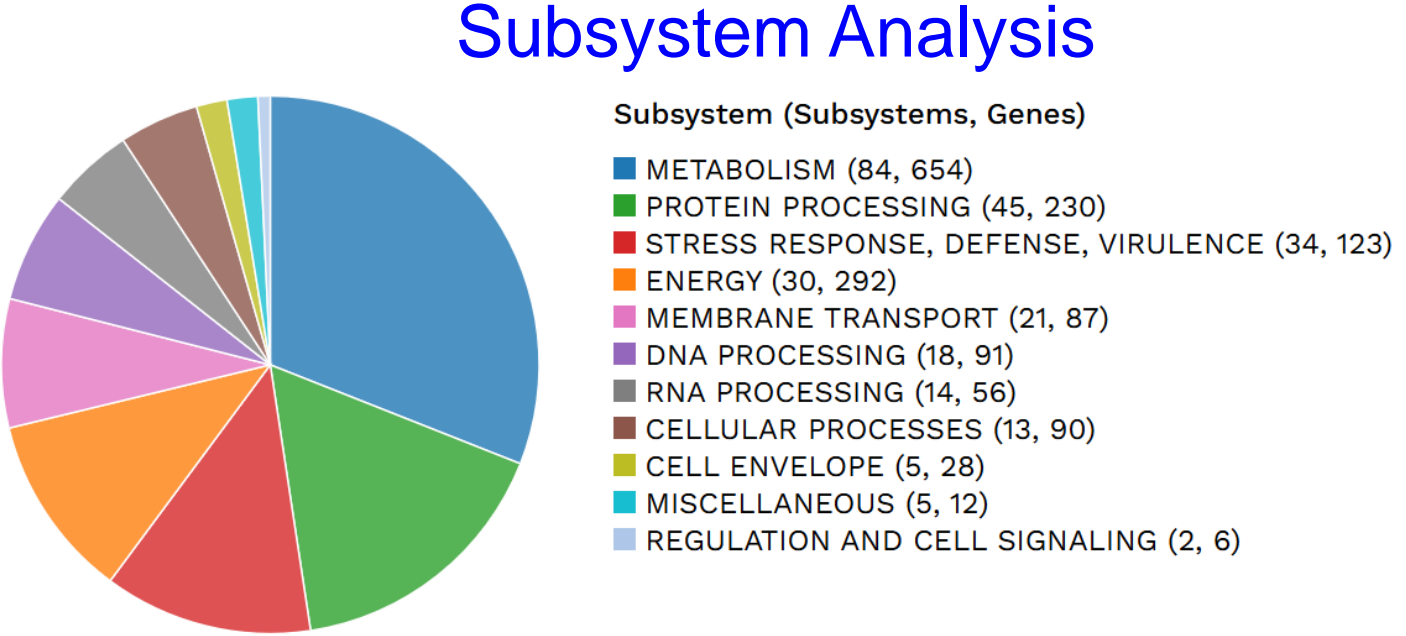


Table 3: Antimicrobial Resistance Genes	
AMR Mechanism	Genes
Antibiotic target in susceptible species	Alr, Ddl, dxr, EF-G, EF-Tu, folA, Dfr, folP, gyrA, gyrB, inhA, fabI, Iso-tRNA, kasA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic inactivation enzyme	AAC(6')-Ib/AAC(6')-II, CARB/PSE family, Mph(A) family, Mph(E)/Mph(G) family, NDM family, OXA-10 family, TEM family
Efflux pump conferring antibiotic resistance	CmlA family, MacA, MacB, MdtABC-TolC, MexHI-OpmD, MexPQ-OpmE, QacE
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA
Regulator modulating expression of antibiotic resistance genes	OxyR

Genome Assembly

