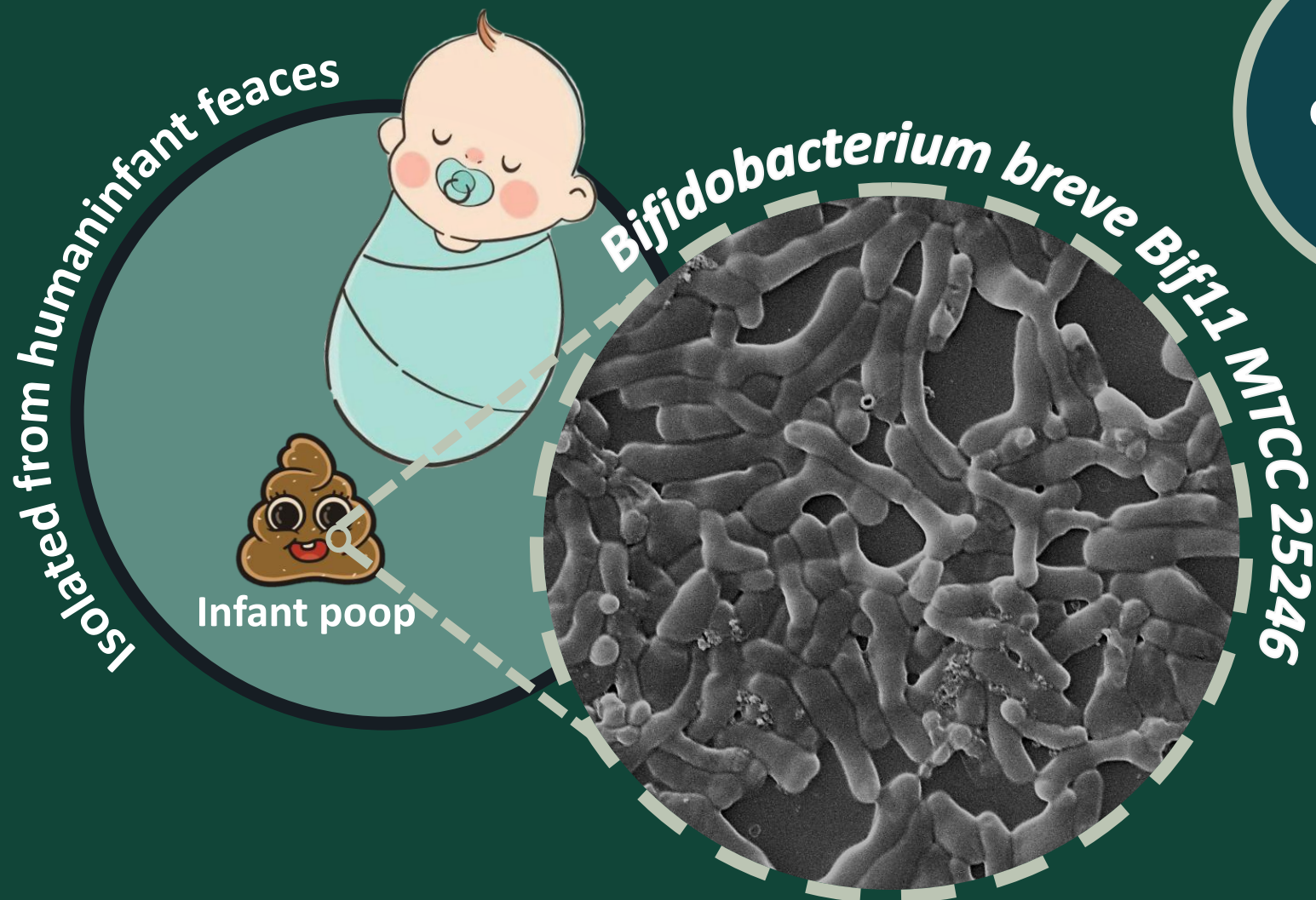




Improves
Gut Barrier
Function

Prevents
intestinal
inflammation

Metabolizes
Prebiotics

Bifidobacterium breve (Bif11)

Genome Accession Number: QELD00000000

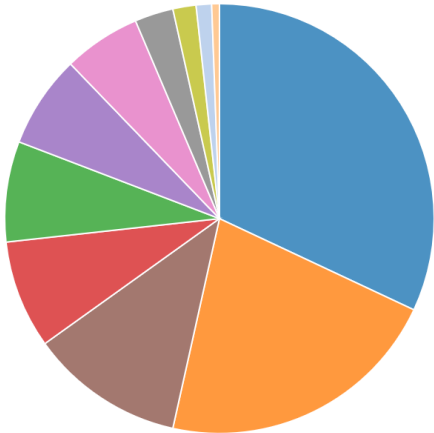
Quality of Genome Assembly and Annotation:

Results from indigenously developed BHARAT analysis pipeline:
(Bacterial Hybrid genome Assembly and Rapid Annotation Toolset)

Table 1: Assembly Details	
Contigs	75
GC Content	58.96
Contig L50	5
Genome Length	2,472,971 bp
Contig N50	164,105

Table 2: Annotated Genome Features	
CDS	2,226
tRNA	52
Repeat Regions	35

Subsystem Analysis



- Subsystem (Subsystems, Genes)
- METABOLISM (55, 317)
 - PROTEIN PROCESSING (37, 201)
 - STRESS RESPONSE, DEFENSE, VIRULENCE (20, 59)
 - DNA PROCESSING (14, 69)
 - ENERGY (13, 74)
 - CELLULAR PROCESSES (12, 63)
 - RNA PROCESSING (10, 40)
 - MEMBRANE TRANSPORT (5, 16)
 - CELL ENVELOPE (3, 8)
 - REGULATION AND CELL SIGNALING (2, 5)
 - MISCELLANEOUS (1, 1)

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, Iso-tRNA, MurA, rho, rpoB, rpoC, S10p, S12p
Antibiotic target modifying enzyme	Erm(X)
Antibiotic target protection protein	Tet(W)
Gene conferring resistance via absence	gidB
Protein altering cell wall charge conferring antibiotic resistance	GdpD, PgsA

Genome Assembly

