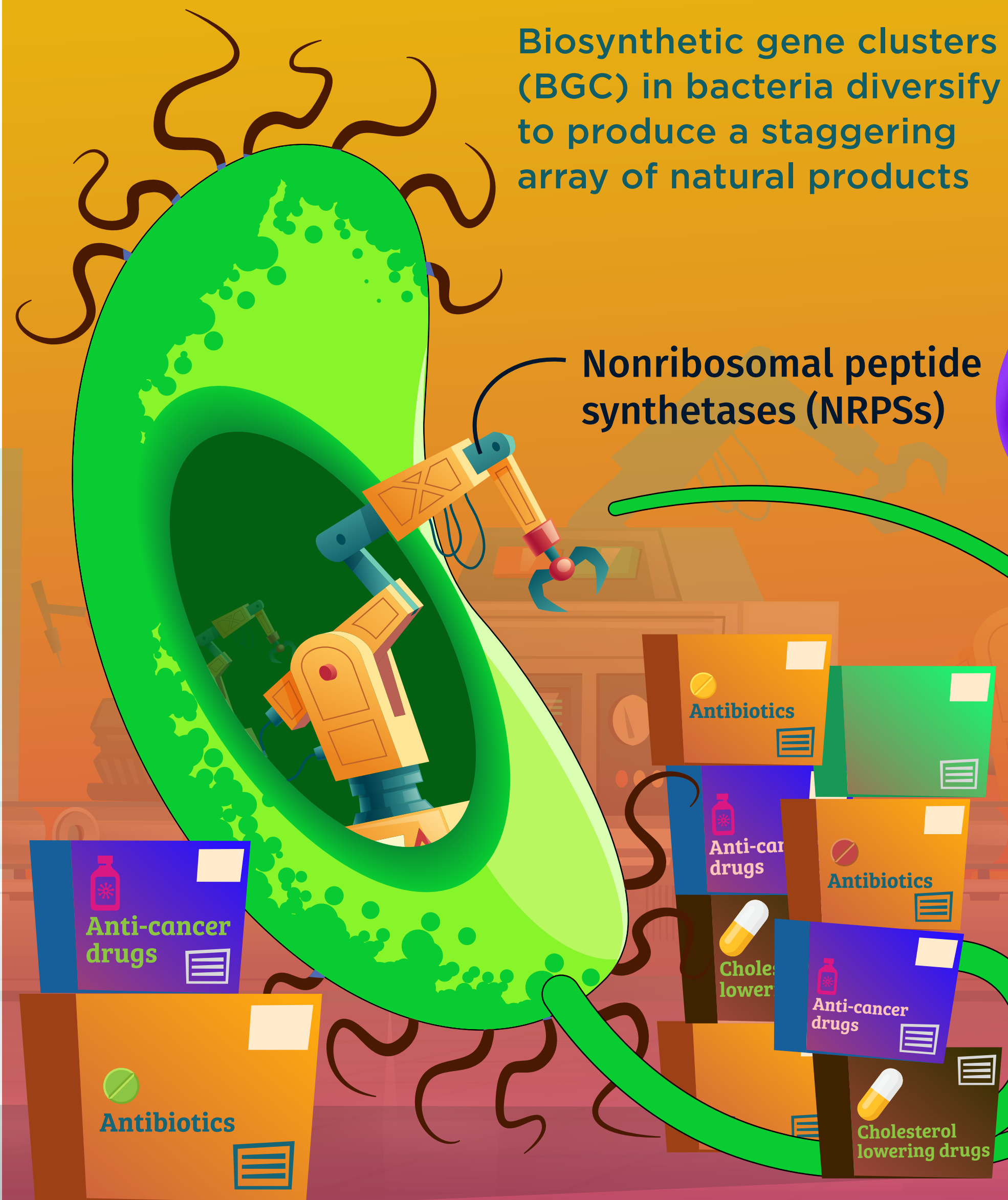


# Unravelling the Evolutionary Diversification Mechanism in Bacteria

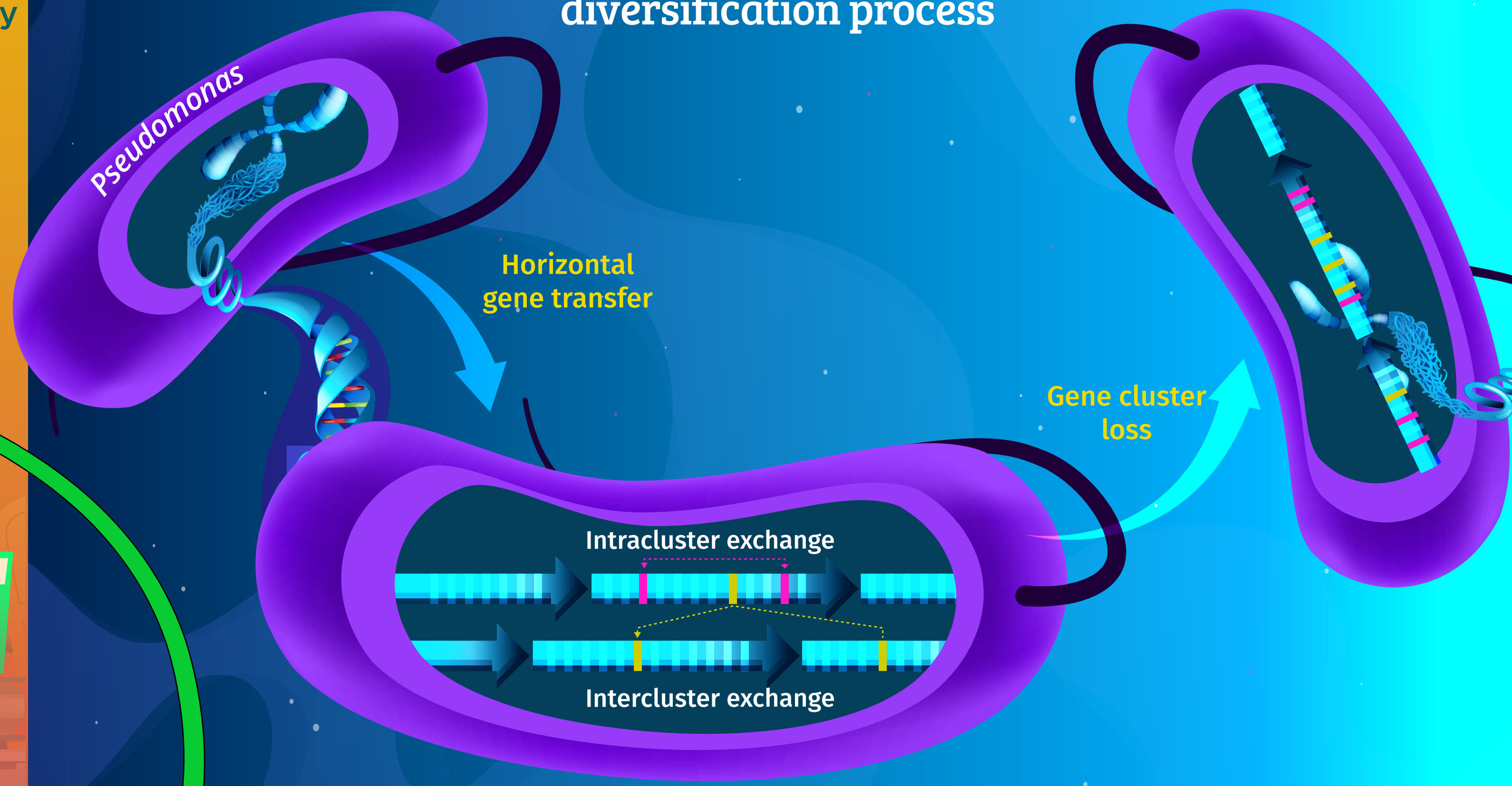
Biosynthetic gene clusters (BGC) in bacteria diversify to produce a staggering array of natural products

Nonribosomal peptide synthetases (NRPSs)



## What is the mechanism of this BGC diversification?

Computational analyses of the genes required for lipopeptide synthesis in *Pseudomonas* revealed an evolutionary snapshot of the BGC diversification process



**Intra and intercluster exchange creates chemical diversity in bacteria that may be exploited for therapeutic use**