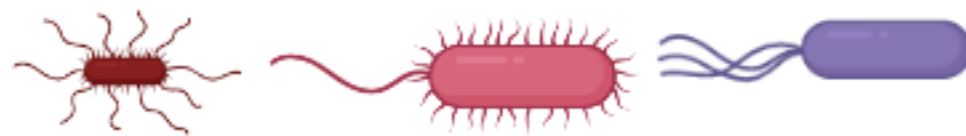


Protein-protein interaction data



4,445 potential samples from StringDB

Quality control

4,363 samples with valid PPI data

Find matching genes

3,023 detected plasmid-encoded genes



Get genes & samples with PPIs

489 samples with 1+ plasmid-related PPIs
3,023 plasmid-encoded genes with 1+ PPIs

Quantify per sample

Plasmid-associated & chromosomal genes & PPIs

Quantify per protein

Dimensionality reduction: PCA, LSA, NMF
Rates of PPIs per protein & per sample
Effects plasmid-related genes on PPI networks
TDA on indirect connections to get aPMNLE

Plasmid resources



27,939 plasmids from
Brooks et al (2019)

6,642 plasmids
from PLSDB

*Select those with
between 2 and
649 valid genes*



16,393 unique plasmids

8,941 unique plasmid-encoded genes



5,918 plasmid-related
genes not present



3,870 samples with no
plasmid-related PPIs

