

Theme: Development and Application of a Sequence-Based Method for Predicting Plasmid Destinations

Purpose:

- (1) To understand plasmid behavior and pathways of horizontal gene transfer via plasmids in natural environments
- (2) Development of a sequence-based method for predicting plasmid destinations

Achievement:

- (1) Development of a model that predicts plasmid destinations from plasmid and bacterial chromosome sequences
- (2) Identification of the factors that determine the destinations of conjugative plasmids
- (3) Application to the efficient selection of plasmid vectors suitable for genetic manipulation of beneficial bacteria

