

# Synthetic PVC Regulation

'Recombineer' cosmid library with inducible promoters

Establish recombineering methodology within the lab

Recombineer inducible promoters on to existing cosmid library

`de novo` clone PVC operons via long PCR and restriction-free assembly

Design primers for assembly and long PCR

Optimise assembly for multiple large fragments

# Natural PVC Regulation

Explore population PVC expression dynamics

Construct PVC promoter fusions

Examine PVC expression via fluorescence microscopy

Explore the role of anti-termination in PVC operons

Identify RfaH-like orthologues and binding sites in PVC operons

Knockout studies

RfaH deletion in *Photorhabdus*

RfaH deletion in *E. coli*

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