

Primer: Metabolic engineering strategies repeat across target molecules

ModCell2: Multi-objective optimization formulation to design Pareto optimal chassis and modules

Modcell2-HPC: Design chassis for hundreds of endogenous products providing general principles for synthetic and natural modular design

MODCELL: Design strains for individual products and find common manipulations

ModCell2-MILP: Identify optimal solutions to design universal chassis and define key metabolic interfaces

Modular design principles in metabolic engineering for efficient and robust systems