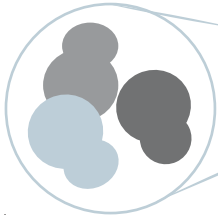
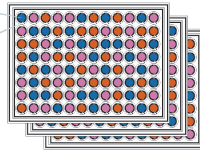


Prior to Experiment Day



Grow cells from randomized plate to appropriate density



Randomize Plates

Repeat each growth-rate assay over multiple days, randomizing the well positions of strains and conditions to ensure the statistical validity of results. Here, each color represents a strain or condition, and each of these factors is randomized in subsequent plates.

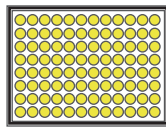
Experiment Day

Prepare Experiment Plate

Filter sterilize concanavalin A and experimental media



conA



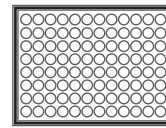
Spin
2 min at
411xg

Incubate
1-2 hr

Remove
conA



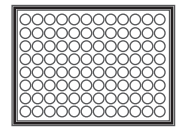
Water



Remove
Water



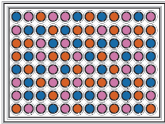
Experimental
Media



Do not allow microscope plate to sit dry

Prepare Cells for Microscopy

Spin 2 min
at 411xg

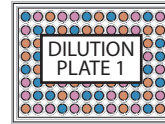


Mix in additional
strains (Optional)



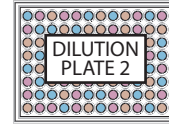
Dilute

Experimental
Media

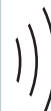


Dilute

Experimental
Media



Sonicate (Optional)



Although the specific dilution volumes used will vary based on plate size and experiment details, always add a small volume of cells to a large volume of media, then add a large volume of media to that. Mix well at each step. Two serial dilutions are suggested to increase mixing of the cells.



Microscopy