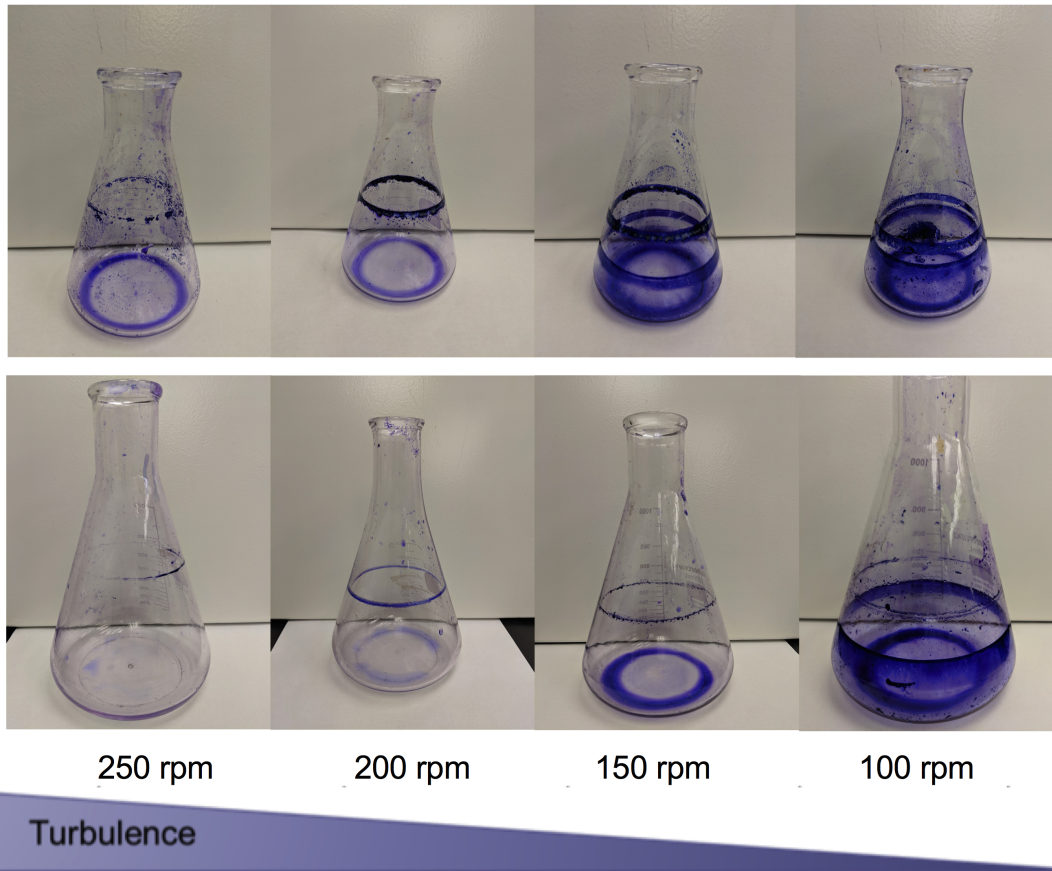
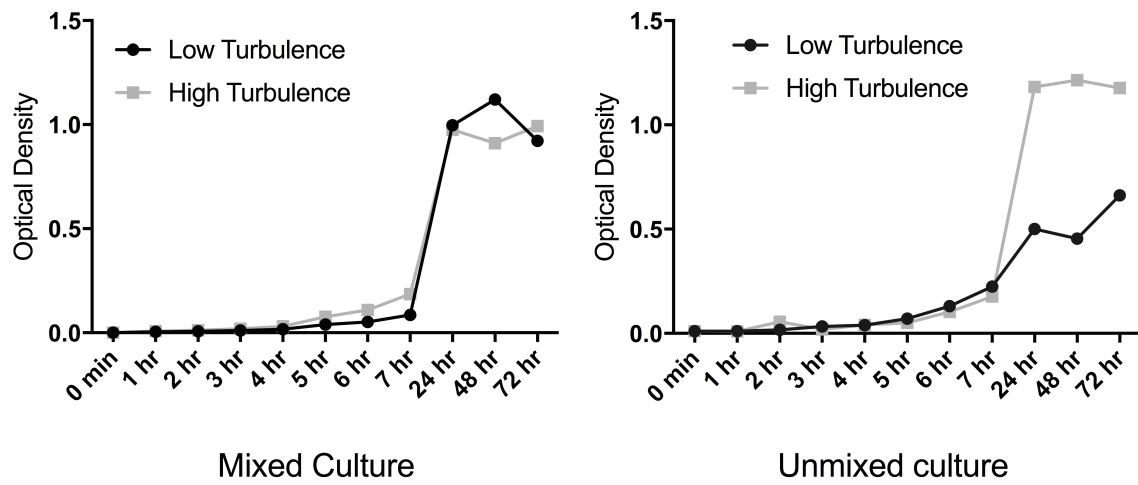


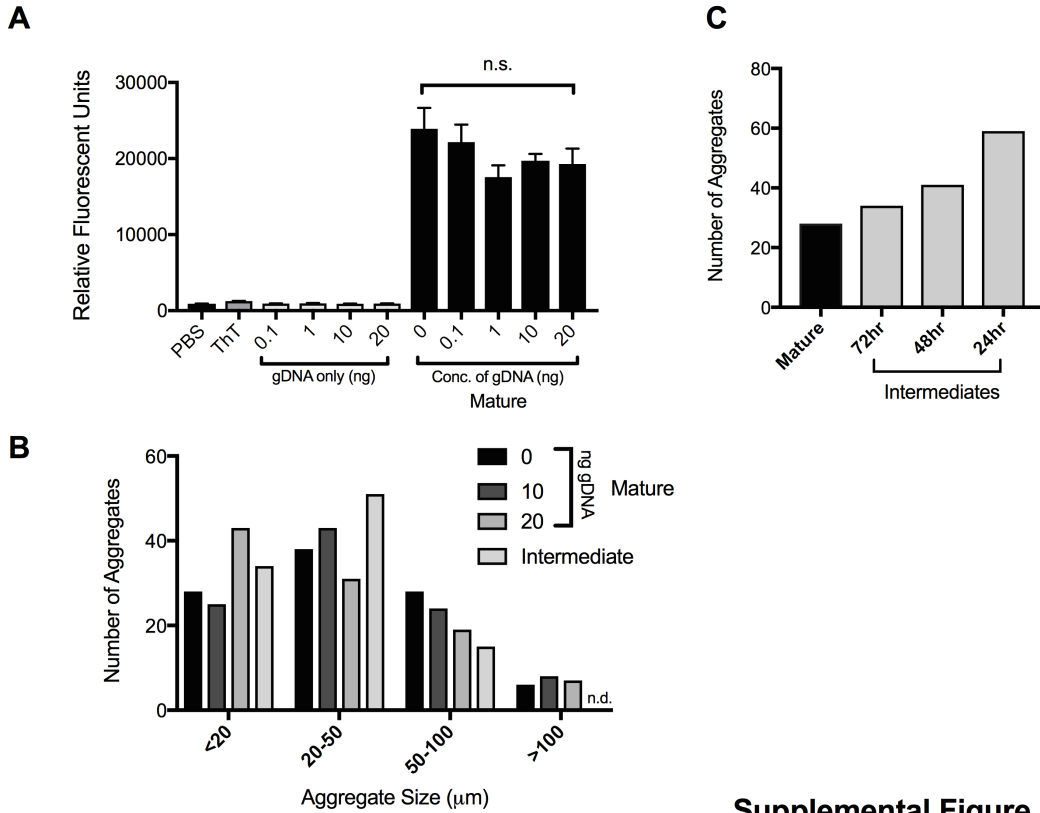
Supplementary Material



Supplementary Figure 1: Crystal violet staining of pellicle associated biofilm from cultures grown in increasing levels of turbulence in both 150-ml (top) and 500-ml (bottom) cultures. The staining of 150-ml cultures at 100 rpm and 50 rpm (lower turbulence) shows a dissociated surface biofilm on the bottom of the flasks. Decreasing turbulence results in better pellicle formation in 500-ml cultures (compare to Fig. 1B).



Supplementary Figure 2: (A) Optical density readings from well mixed (left) and unixed (right) aliquots of high-turbulence and low-turbulence cultures sampled at the time points shown on the x-axis. Lag phase growth of the two conditions was similar during the first 24 h of culture. Representative results of three independent experiments.



Supplemental Figure 3

Supplementary Figure 3:

(A) A purified curli preparation from a low turbulence culture was treated with or without STM genomic DNA (gDNA) at the indicated concentration. Fluorescence of samples incubated at 37 °C for 24 h and stained with ThT was determined. Plotted are mean relative fluorescent units (\pm SEM) of three replicates. No significant differences were observed (n.s.). (B) Enumeration of difference in size of aggregates calculated by confocal microscopy images. Aggregates were measured within the LAS AF confocal system and grouped into one of four groups. 100 aggregates were counted for each condition. n.d. stands for not determined. (C) Enumeration of 100 aggregates from mature aggregates and intermediates from three time points (72hrs, 48hrs, and 24hrs). Shown are counts for aggregates less than 20 μ m. This graph shows increasing numbers of the smallest aggregates in earlier time point intermediates.

Legends for the Movies:

Movie 1: A video taken of 150-ml (in a 500-ml flask) and 500-ml (in 1-L flask) at the 72-hour time point showing the visible difference in turbulence despite shaking at the same rpm (200 rpm). Note the foamy layer on top of the medium in the larger flask.

Movie 2: A video of 500-ml culture being grown shaking at 130 rpm to reduce visible turbulence.