Supplementary Information for:

Density-dependent adaptive resistance allows swimming bacteria to colonize an antibiotic gradient

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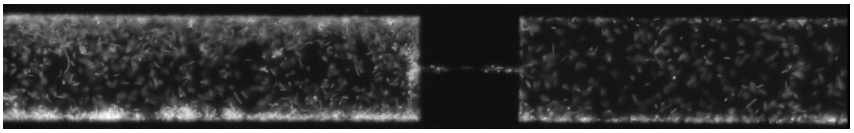
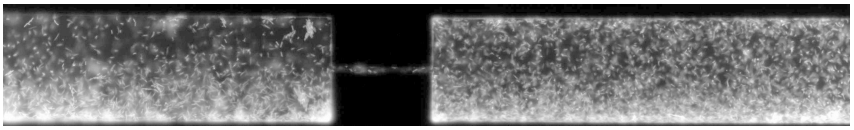
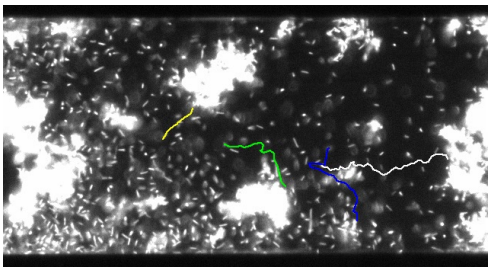
Supplementary Movie Legends



Movie S1. Invasion of the kanamycin compartment. Movie showing the connector region of the experiment shown in Fig. 1C. Two invasion waves can be discerned. The second high-density wave establishes a population in the center of the kanamycin compartment as can be seen in Fig. 1C. Images were acquired every 10 minutes, intensity is scaled logarithmically in order to make single cells, as well as dense cellular aggregates visible.



Movie S2. Invasion of the kanamycin compartment. Movie showing the connector region of the experiment shown in Fig. 2. The high-density invasion leads to a successful colonization of the kanamycin compartment. Images were acquired every 15 minutes, intensity is scaled logarithmically.



Movie S3. Free swimming *E. coli* in the kanamycin compartment. Movie showing swimming trajectories of individual bacteria in the kanamycin compartment. Images were taken 9 hours after cells invaded the kanamycin compartment and established a population there. Frames were acquired at 10 Hz (100 ms exposure time) for 8 seconds.