

Description of Additional Supplementary Files

Supplementary Movie 1: Simulated competitions between two T6SS- (U)armed strains.

Three representative agent-based model simulations show monolayer ‘patch’ communities growing from a randomly-scattered 1:1 inoculum of two unarmed strains (green, dark green). From left to right, the inoculation cell density is increased (20:20, 50:50 and 100:100 cells scattered in a circle of diameter 100.0 μm), resulting in greater contact between the two strains. Each patch contains a fixed quota of growth-limiting resources, which cells consume as they divide exponentially. Simulations terminate once patch resources are depleted. Movie plays at 15 frames per second; screen measures $\sim 750 \times 450 \mu\text{m}$.

Supplementary Movie 2: Simulated competitions between T6SS- (U)armed and T6SS+ (R)andom-firing strains.

Three representative agent-based model simulations show competition between an unarmed strain (green) competing with a T6SS+ random-firing strain (blue); intoxicated cells are shown in red. Increasing initial cell density (left to right: 20:20, 50:50, 100:100 cells) increases U-R strain contact, resulting in increased killing of U-type cells. Parameters used throughout: $N_{\text{hits}} = 2$, $k_{\text{fire,R}} = 50.0 \text{ firings cell}^{-1} \text{ h}^{-1}$, $k_{\text{lysis}} = 8.0 \text{ h}^{-1}$, $c_{\text{upfront}} = 0.05$, $c = 0.001$. Movie plays at 15 frames per second; screen measures $\sim 750 \times 450 \mu\text{m}$.

Supplementary Movie 3: Simulated competitions between two T6SS+ (R)andom-firing strains.

Three representative agent-based model simulations show competition between two T6SS+ random-firing strains (R1: pink; R2, blue) at fixed cell density (200:200 cell inoculum).

The two strains are mutually susceptible to one another's toxins. From left to right, R1's firing rate is held constant ($k_{\text{fire,R1}} = 50.0$ firings $\text{cell}^{-1} \text{h}^{-1}$), while R2's firing rate is increased ($k_{\text{fire,R2}} = 0.0$, 50.0 and 200.0 firings $\text{cell}^{-1} \text{h}^{-1}$). $N_{\text{hits}} = 2$, $k_{\text{lysis}} = 8.0 \text{ h}^{-1}$, $c_{\text{upfront}} = 0.05$, $c = 0.001$. Movie plays at 15 frames per second; screen measures $\sim 750 \times 450 \mu\text{m}$.

Supplementary Movie 4: Simulated competitions between T6SS+ (R)andom-firing and T6SS+ Tit-For-Tat (TFT) retaliator strains. Three representative agent-based model simulations show competition between a T6SS+ random-firing strain (blue) competing with a T6SS+ tit-for-tat retaliator strain (yellow); intoxicated cells are shown in red. The two strains are mutually susceptible to one another's toxins. Increasing initial cell density (left to right: 20:20, 50:50, 100:100 cells) increases inter-strain contact, favoring the random attacker. Parameters used throughout: $N_{\text{hits}} = 2$, $k_{\text{fire,R}} = 50.0$ firings $\text{cell}^{-1} \text{h}^{-1}$, $k_{\text{lysis}} = 8.0 \text{ h}^{-1}$, $c_{\text{upfront}} = 0.05$, $c = 0.001$. Movie plays at 15 frames per second; screen measures $\sim 750 \times 450 \mu\text{m}$.

Supplementary Movie 5: Simulated competitions between T6SS+ (R)andom-firing and T6SS+ 2-Tits-For-Tat (2TFT) retaliator strains. Three representative agent-based model simulations show competition between a T6SS+ random-firing strain (blue) competing with a T6SS+ 2-tits-for-tat retaliator strain (yellow); intoxicated cells are shown in red. The two strains are mutually susceptible to one another's toxins. Increasing initial cell density (left to right: 20:20, 50:50, 100:100 cells) increases inter-strain contact, favoring the retaliator strain. Parameters used throughout: $N_{\text{hits}} = 2$, $k_{\text{fire,R}} = 50.0$ firings $\text{cell}^{-1} \text{h}^{-1}$, $k_{\text{lysis}} = 8.0 \text{ h}^{-1}$, $c_{\text{upfront}} = 0.05$, $c = 0.001$. Movie plays at 15 frames per second; screen measures $\sim 750 \times 450 \mu\text{m}$.

Supplementary Movie 6: Overview of mixtures containing *P. aeruginosa* PAO1 and T6SS+ *V. cholerae* 2740-80. *P. aeruginosa* PAO1 *tssB-mNeongreen* was mixed with *V. cholerae* 2740-80 *vipA-mCherry2* in 1:5 ratio and monitored over 5 min at a frame rate of 30 frames per minute. Two representative time-lapse series are shown. A merge of phase contrast, GFP channel and mCherry channel is shown. Contrast was adjusted equally. Fields of view measure 39 x 26 μm ; scale bar represents 5 μm . Movie plays at 5 frames per second.

Supplementary Movie 7: Overview of mixtures containing *P. aeruginosa* PAO1 and T6SS- *V. cholerae* 2740-80. *P. aeruginosa* PAO1 *tssB-mNeongreen* was mixed with *V. cholerae* 2740-80 *vipA-mCherry2* Δ *hcp1* Δ *hcp2* in 1:5 ratio and monitored over 5 min at a frame rate of 30 frames per minute. Two representative time-lapse series are shown. A merge of phase contrast, GFP channel and mCherry channel is shown. Contrast was adjusted equally. Fields of view measure 39 x 26 μm ; scale bar represents 5 μm . Movie plays at 5 frames per second.

Supplementary Movie 8: Close-ups of mixtures containing *P. aeruginosa* PAO1 and T6SS+ *V. cholerae* 2740-80. *P. aeruginosa* PAO1 *tssB-mNeongreen* was mixed with *V. cholerae* 2740-80 *vipA-mCherry2* in 1:5 ratio and monitored over 5 min at a frame rate of 30 frames per minute. Examples showing between 1 and 6 *P. aeruginosa* T6SS firings against *V. cholerae* are presented (2 examples each). A merge of phase contrast, GFP channel and mCherry channel is shown. Contrast was adjusted equally. Fields of view measure 6.5 x 6.5 μm ; scale bar represents 1 μm . Movie plays at 5 frames per second.