Supplementary Materials: Influences of Adhesion Variability on the "Living" Dynamics of Filamentous Bacteria in Microfluidic Channels

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Table S1. Doubling time for filamenting *fim*$^+$ and *fim*$^-$ cells in suspension and on the different surfaces. Error represents a 95% confidence interval.

On surface		Doubling time (min)
fim$^-$	man^{3+}	37 ± 4
Fim$^+$	man^0	30 ± 3
	man^1	30 ± 3
	man^{3+}	33 ± 5
in suspension		
• OD		
fim$^-$		21 ± 6
fim$^+$		20 ± 3
• microscope		
fim$^-$		20 ± 3
fim$^+$		23 ± 5

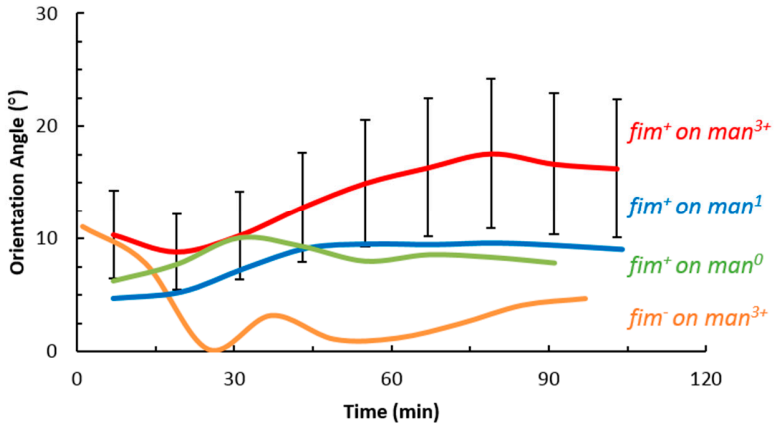

Figure S1. Dynamic orientation angle during cell filamentation on substrates. The orientation angle between the ends of the growing filaments and the flow direction is shown as a function of time for the various surfaces and bacterial strains examined. Error bars representing the standard error are shown for *fim*$^+$ on man^{3+}; the error bars for the other lines are omitted for clarity but are of similar sizes or smaller than *fim*$^+$ on man^{3+}.

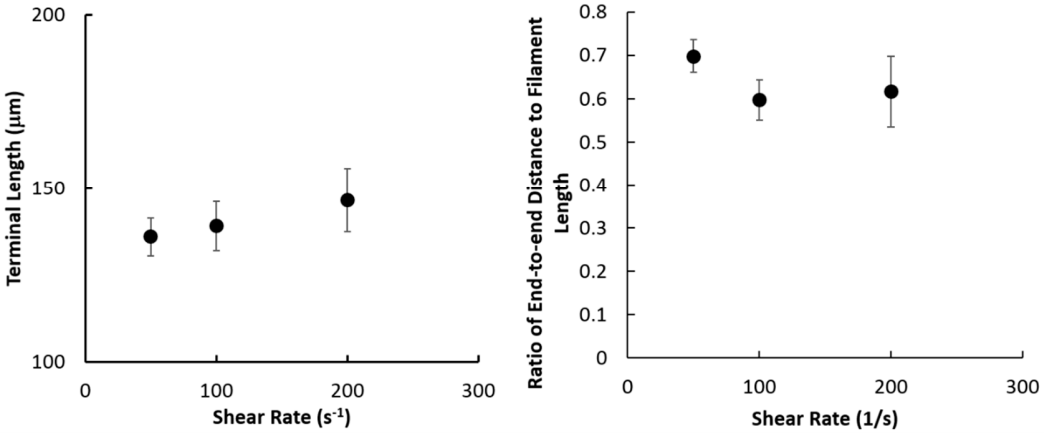

Figure S2. Investigation of shear effect on terminal length and buckling geometry of *fim*$^+$ filamentous cells. Terminal length (left) and ratio between end-to-end and terminal lengths (right) for *fim*$^+$ filaments on BSA substrates as functions of shear rate. The error bars represent standard error from measurements of at least 8 filaments.