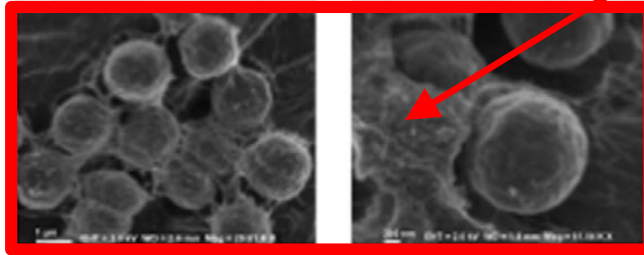


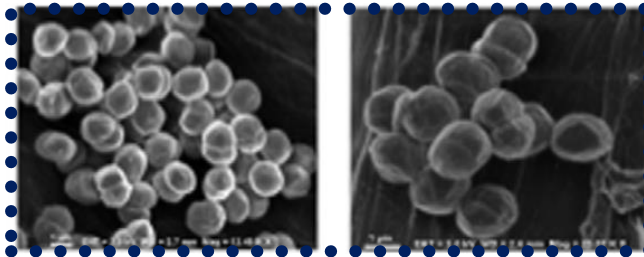
Slowdown of the surface diffusion during the early stages of bacterial colonization.

T. Vourc'h, J. Léopoldès, A. Méjean, H. Peerhossaini

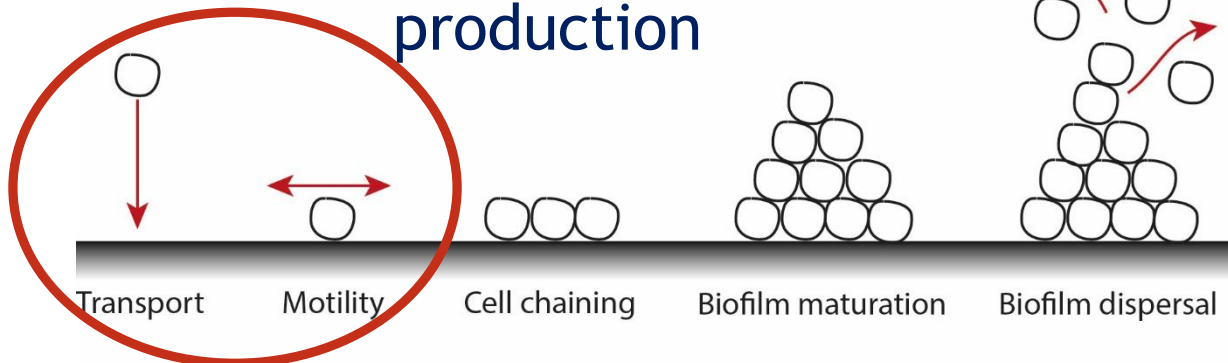
Wild Type Cells EPS



Jittawuttipoka et al., 2015

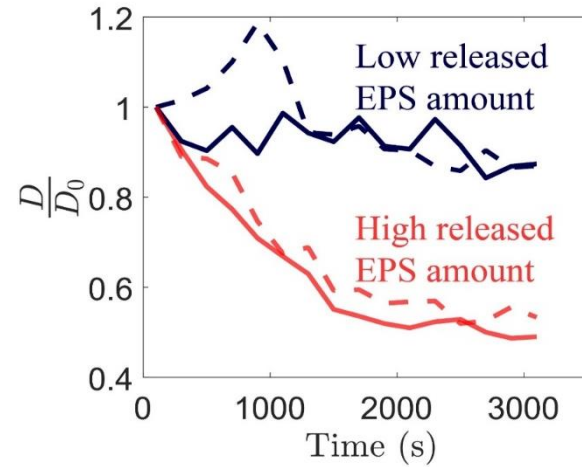
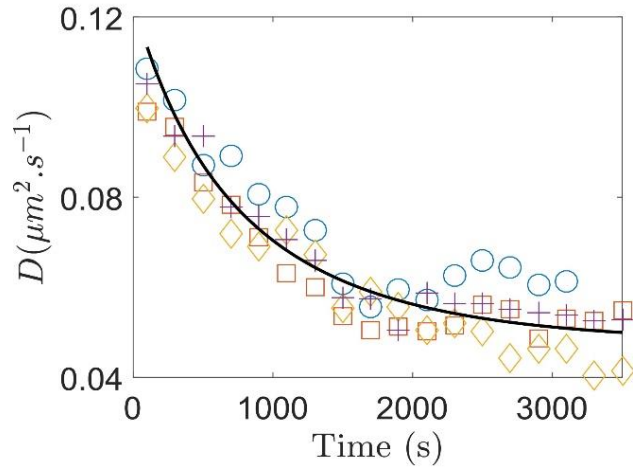


Mutant cells - Deficient in EPS production



Different stages of biofilm formation

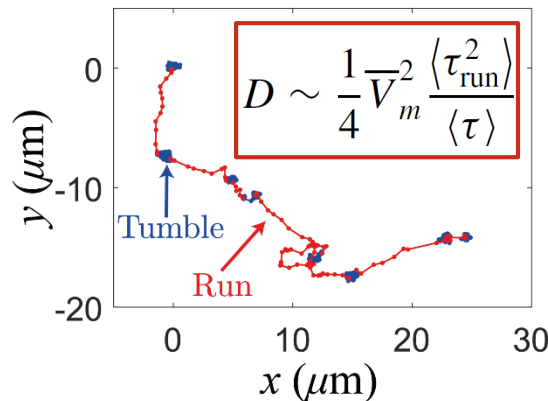
Main results of this work



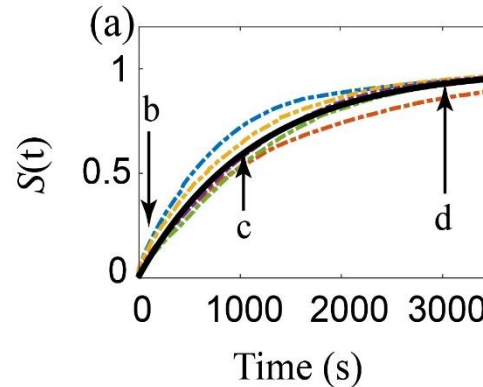
Slowdown of the diffusion coefficient:
Experimental (symbols) and model
(black line)

This slowdown is not observed for
mutants deficient in EPS production

Model
 based on:



A typical trajectory displays
intermittent motility



The surface can be progressively covered
with the released EPSs

