## **Supporting Information**

## Bacterial Swimming Motility Enhances Cell Deposition and Surface Coverage

Alexis J. de Kerchove and Menachem Elimelech\*

Department of Chemical Engineering Environmental Engineering Program Yale University New Haven, CT 06520-8286 (\*E-mail: menachem.elimelech@yale.edu)

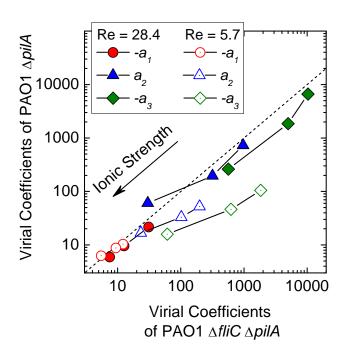


FIGURE S1. Comparison of the three virial coefficients of motile PAO1  $\Delta pilA$  and non-motile PAO1  $\Delta fliC$   $\Delta pilA$ . Virial coefficients were calculated for various ionic strengths (1, 10, and 100 mM), and average flow velocities (Reynolds numbers). Arrow indicates change in virial coefficient from low to high ionic strength. Lines do not represent modeling results.

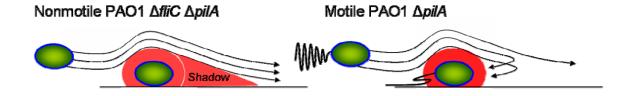


Figure S2. Enhancement of deposition was observed for motile *Pseudomonas* aeruginosa (PAO1  $\Delta pilA$ ) in the rear position of adhering cells by upstream swimming, when compared to adhesion of nonmotile *Pseudomonas aeruginosa* (PAO1  $\Delta fliC$   $\Delta pilA$ ). See video as a separate file under Supporting Information.