

Supporting Information

Celli et al. 10.1073/pnas.0903438106

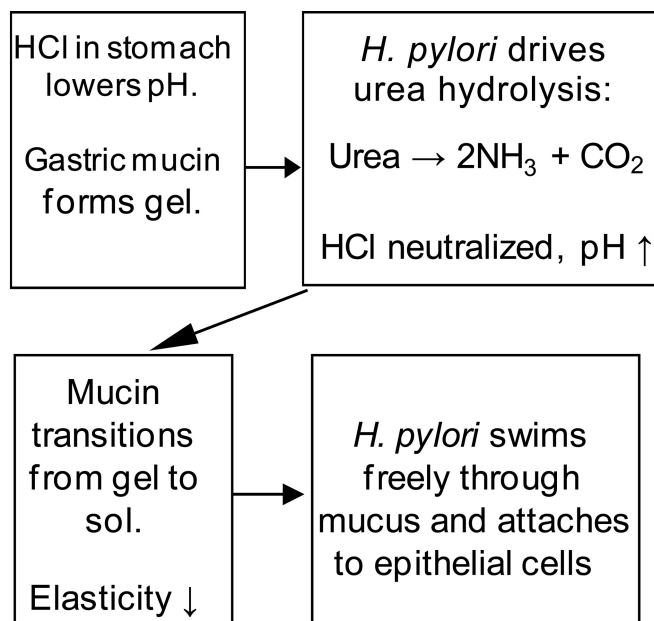
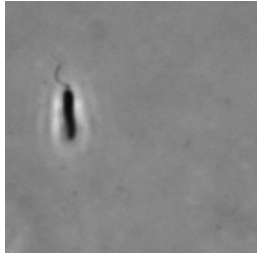
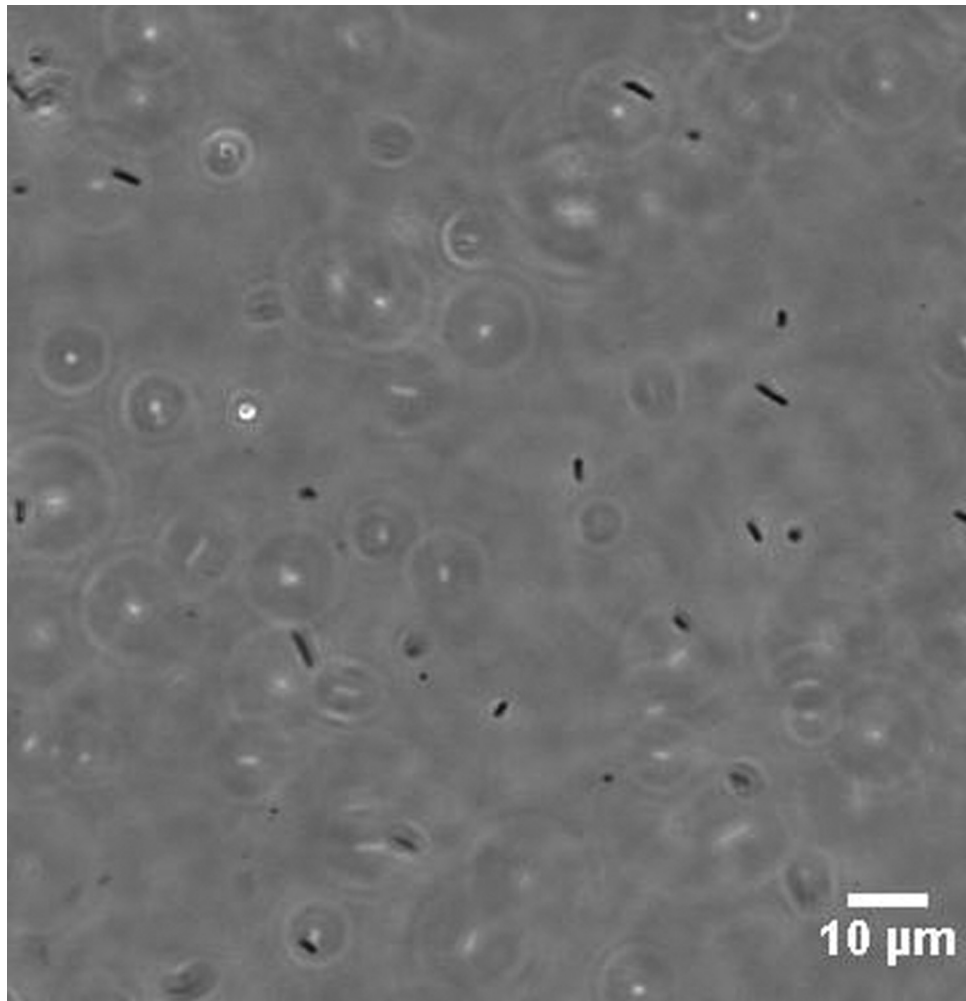


Fig. S1. Schematic of the proposed mechanism by which *H. pylori* is able to attain motility in the mucus gel by inducing the pH-dependent sol-gel transition of mucin.



Movie S1. *H. pylori* confined in PGM gel (pH 4). Although the cell is unable to achieve translational motility, active rotation of the flagella bundle and driven oscillations of the cell body can be observed.

[Movie S1 \(AVI\)](#)



Movie S2. *H. pylori* swimming freely in PGM at pH 6.

[Movie S2 \(AVI\)](#)