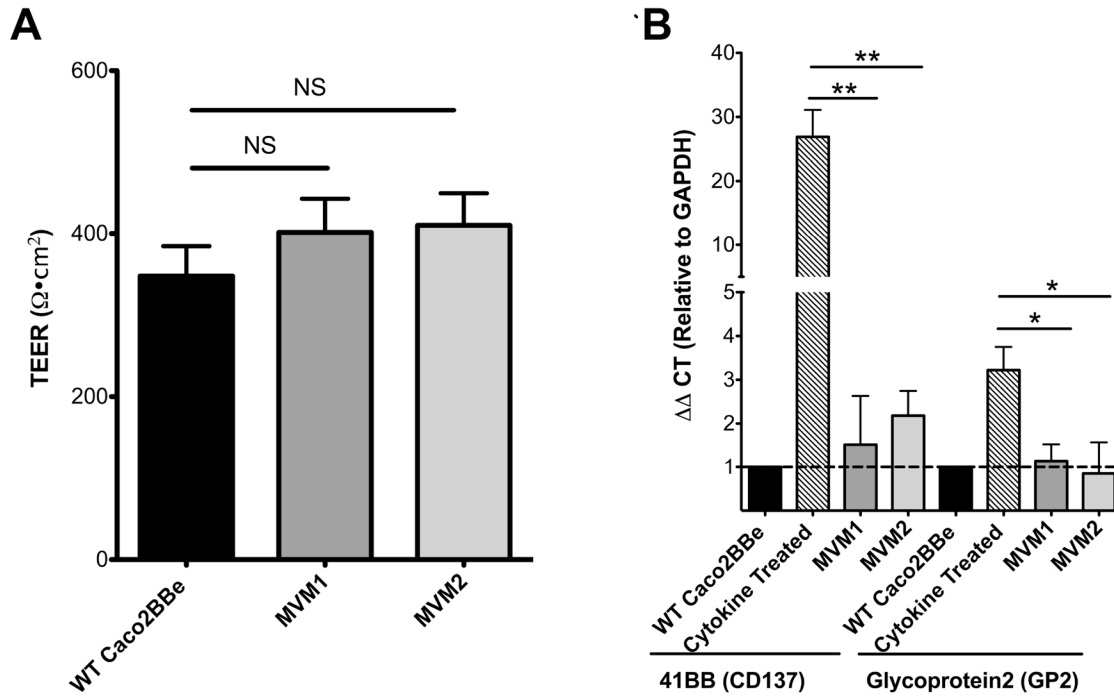
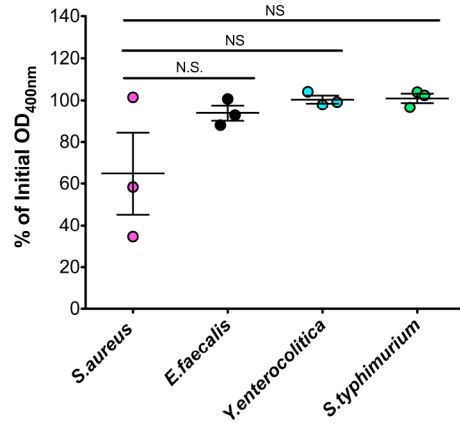
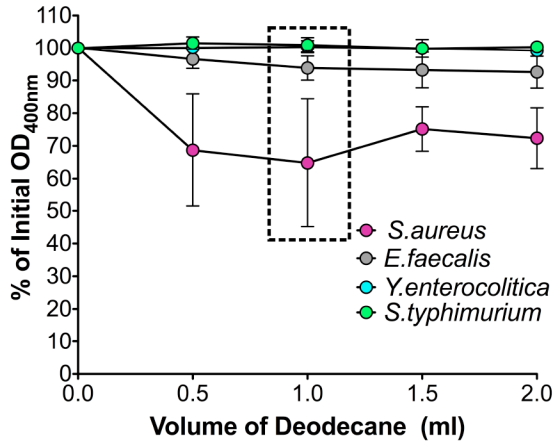


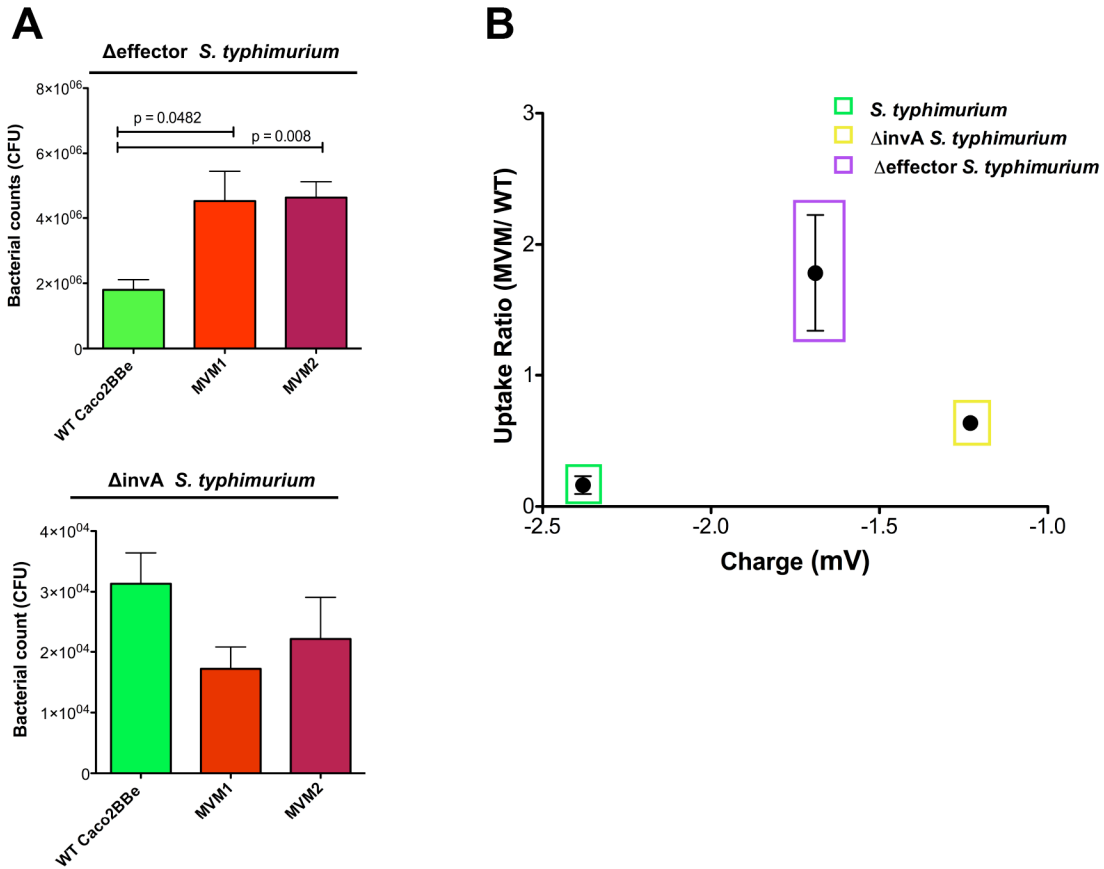
Bennett, et al., Supplemental Figures



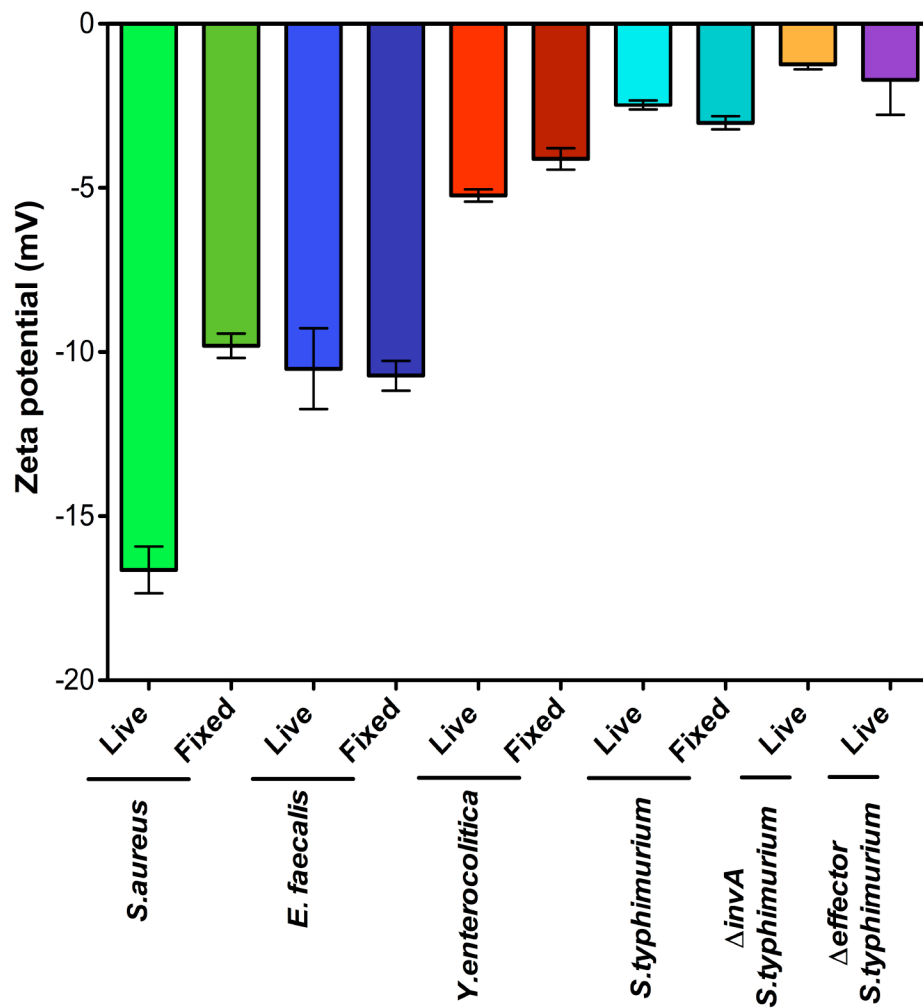
**Supplemental Figure S1.** Characterization of MVM cell model. A, MVM cells showed similar transepithelial electrical resistance (TEER) compared to WT. Error bars represent SEM (n=3); significance was determined using paired Student's t-test. B, MVM cells were assayed for induction of M cell related genes using qPCR. MVM cells showed no induction M cell related genes as compared to cytokine treated positive control. Error bars represent SEM (n=3); significance was determined using paired Student's t-test.



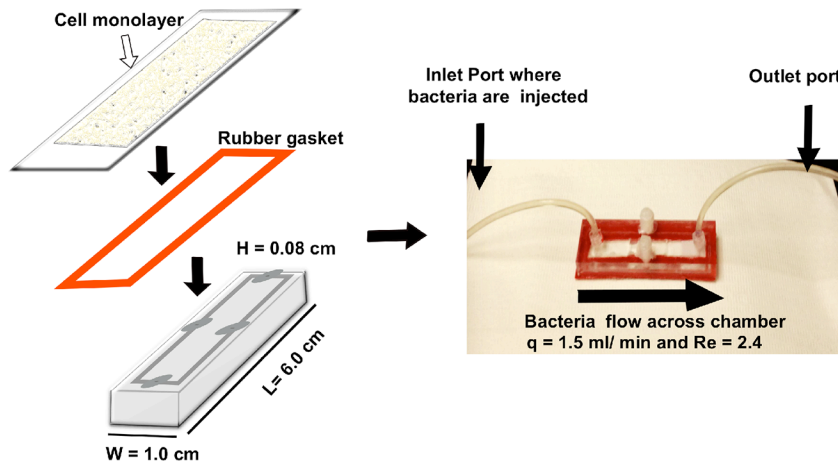
**Supplemental Figure S2.** Bacterial MATH analysis. Microbial Adhesion to Hydrocarbon (MATH) was used to determine the hydrophobicity of the bacteria used in the uptake/adhesion assay. All bacteria showed low hydrophobicity, with no significant differences among them. Error bars represent three individual experiments ran in triplicate and differences within the dataset were found to be non-significant using a one-way ANOVA analysis.



**Supplemental Figure S3.** Epithelial cell uptake of mutant *S. typhimurium* strains. A, Uptake of mutant strains *S. typhimurium* was performed to show that WT *S. typhimurium* had preference toward WT cell due to effacement mechanism and not charge. *Salmonella* strain where effacement mechanism was knocked out shows a restored preference for MVM cells. B, Ratios of uptake between MVM and Caco2BBE cells were quantified,  $\Delta$ effector *S. typhimurium* showed a higher preference toward MVM cells compared to WT and  $\Delta$ invA *S. typhimurium*. Error bars indicate the sum of two individual experiments with two biological replicates.



**Supplemental Figure S4.** Quantification of bacterial Zeta Potential. The magnitude of surface charge was approximated for each bacteria used in this study by measuring its zeta potentials using laser Doppler electrophoresis. Most Bacteria had similar zeta potentials regardless of being fixed with 1% PFA/PBS solution or a live, with the exception of *S.aureus*. Error bars represent (SEM) triplicate measurement of three individual bacterial cultures (n=9).



**Supplemental Figure S5.** Schematic of flow chamber for dynamic adherence assay. A flow chamber was clamped on to a glass slide on which a cell monolayer had been grown. The device was mounted on a confocal microscope for video documentation, and then a suspension of bacteria was injected into the chamber at a constant flow rate.