Supplementary



Fig. S1. Relative OMV production by *V. fischeri* **mutants.** OMVs were prepared from culture supernatants of wild type cells (WT), or of a *waaL* or *ompU* derivative. The relative amounts of OMVs made were determined using the FM4-64 lipid-based assay. One way ANOVA; ns, not significant; ****, p < 0.02.

Supplementary



Fig. S2. The V. fischeri O-antigen is not required for OMV-induced responses. (A-B) Animals were either inoculated with no V. fischeri cells (Apo), wild-type cells (WT), or cells of an O-antigen deficient mutant (*waaL*), or exposed to OMVs (50 μ g of OMV protein/mL) released by those two strains. (A) Level of hemocyte trafficking, or (B) counts of apoptotic nuclei, in the anterior appendages of animals exposed for 18 or 24 h respectively. Oneway ANOVA (for A, F=31; for B F=16); ns, not significant; ****, p<0.0001; n= 20.



Fig. S3. Effect of phenamil treatment on OMV release. Fold-change, relative to wild type (WT) without phenamil treatment, of OMV production by a non-motile mutant (*motB1*) or a hypermotile mutant (HS), in the presence of either the flagellar-motor inhibitor, phenamil (40 μ M), or the solvent carrier, DMSO. OMVs were quantified by a lipid-based assay; values are the average <u>+</u>SEM, n=3.



Fig. S4. Sheathed flagella linked to increased OMV production. Fold-difference, relative to wild-type (WT) *V. fischeri*, of OMV production by WT and aflagellate (*flrA*) strains of *V. fischeri* (Vf), *V. cholerae* (Vc) or *E. coli* (Ec). OMVs were quantified by a lipid-based assay; values are the average <u>+</u>SEM, n=3.

Supplementary



Fig. S5. Comparison of OMVs released by *V. fischeri* **motility mutants.** (A) Coomassie-stained SDS-PAGE gel showing protein profiles of OMV produced by the *V. fischeri* aflagellate mutant (*flrA*), the non-rotating motility mutant (*motB1*), the parental strain ES114 (WT), or a spontaneous hyperflagellated mutant (HS). Each well was loaded with 1.2 μ g of protein. (B) TEM images of OMVs prepared from the indicated strains, prior to sucrose gradient purification (sheathed flagella fragments are still present in all but the aflagellate *flrA* prep); scale bars = 200 nm.