Functional integration of the circulatory, immune, and respiratory systems in mosquito larvae: pathogen killing in the hemocyte-rich tracheal tufts

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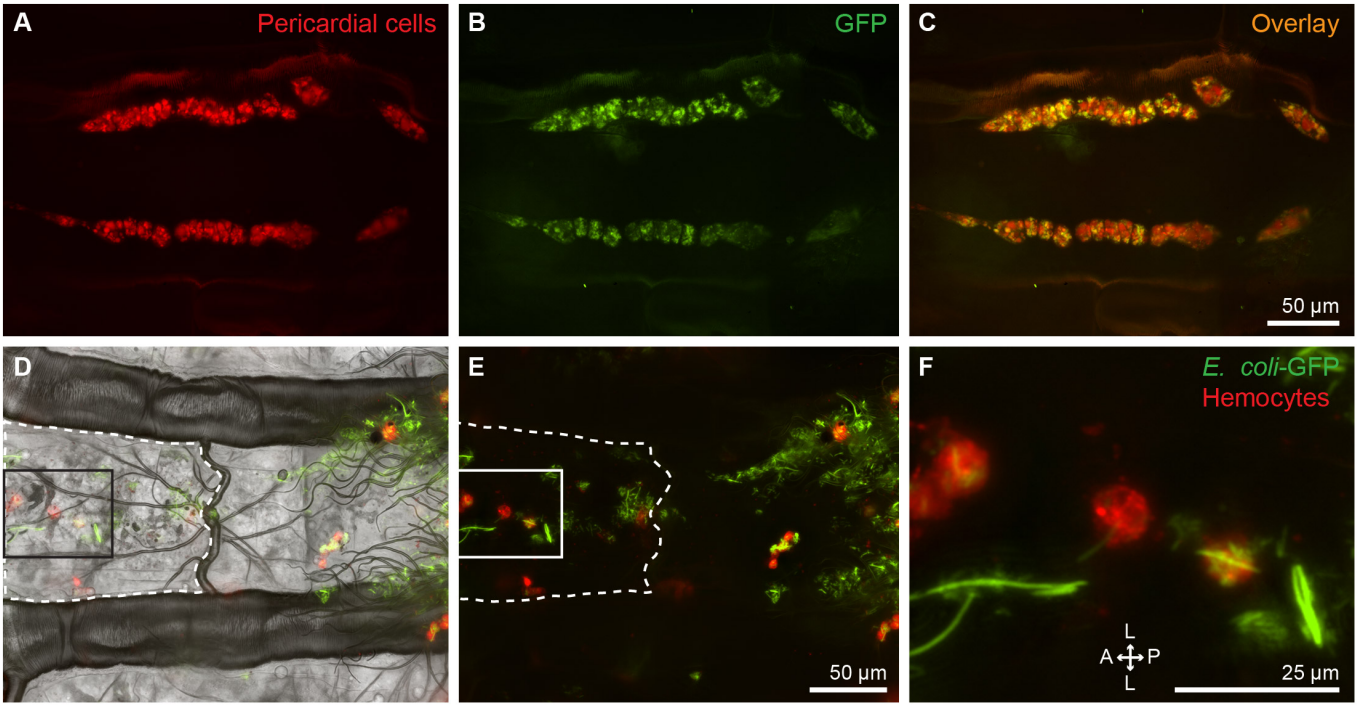

Additional File 8: Figure S6. GFP signal from periostial region ROIs of larvae originate from pericardial cells and segmental hemocytes. (**A-C**) Fluorescence images taken at 4 h post-treatment showing that pericardial cells (A; IgG 568 nm, red) pinocytose GFP (B) that is flowing with the hemolymph following its release from degrading GFP-*E. coli* (overlay of A and B is shown in C). (**D-F**) Bright-field and fluorescence images of a portion of the 7th and 8th abdominal segments of a dissected larva at 4 h post-injection with GFP-*E. coli* (green), showing that both the tracheal tuft hemocytes and the dorsal segmental hemocytes (CM-DiI; red) engage in phagocytosis. A group of segmental hemocytes (D-E, rectangle) that have phagocytosed *E. coli* within the 7th abdominal segment region of interest (area within dashed outline) is magnified in F. Neither pathogens nor hemocytes were detected within the periostial regions. Directional arrows: A, anterior; P, posterior; L, lateral.