



**Supplementary Material 2.** Boxplots showing distribution of bacterial loads (log[colony forming units per fly]) measured in virgin adult female *D. melanogaster* that had been sired by “stud” or “dud” males, developing in one of two pathogen-exposure treatments. Neither of the main effects, nor their interaction were statistically significant (sire;  $F_{1,41} = 0.01$ ,  $p = 0.91$ ; pathogen exposure:  $F_{1,41} = 0.002$ ,  $p = 0.96$ ; sire x pathogen exposure:  $F_{1,41} = 3.44$ ,  $p = 0.07$ ). The box encloses values between the first and third quartiles of the data (the inter-quartile range, IQR), while the horizontal bar within the box indicates the median. Whiskers extend from the box to largest/smallest values that are within 1.5 x the IQR of the box. Values outside that range are outliers and are indicated by circles.