



**Supplementary Material 3.** Boxplots showing distribution of bacterial loads (log[colony forming units per fly]) measured in virgin adult male *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;  $F_{1,25}=1.77$ ,  $p=0.20$ ; pathogen exposure:  $F_{1,25}=0.42$ ,  $p=0.52$ ; sire x pathogen exposure:  $F_{1,25}=1.68$ ,  $p=0.21$ ). 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.