

**Figure S1.** Box-plots showing the absolute abundance of 16S rRNA gene copy number of the different gut bacteria analysed in *N. ceranae* infected and non-infected bees at each age. The line represents the median, while the box represents 50% of the observations and the whiskers reach the interquartile range of 1.5x. Cases where the distribution of samples does not allow for boxing are represented by circles. For pairwise comparisons, the Mann-Whitney test was used. \* $p < 0.05$ .

