

## **A lack of evidence for extensive horizontal gene transfer in the genome of the tardigrade *Hypsibius dujardini***

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### **Supplemental File 5: Library insert sizes**

We estimated library insert sizes by mapping read pairs to the initial single-end CLC assembly. This works well for short insert libraries, but less well for mate-pairs, where many read pairs do not map to the same contig. This failure to map to the same contig means that the mate pair reads are undercounted.

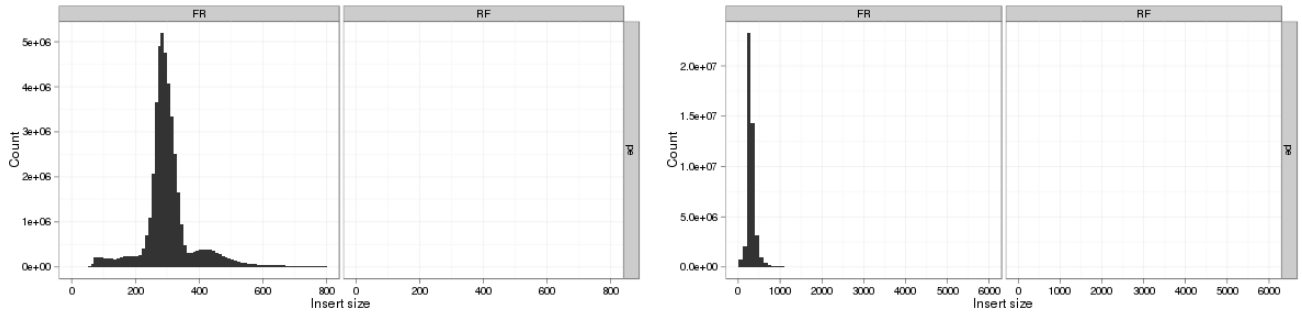
The insert size distribution of the “300 base” standard library on the preliminary SE assembly had a median of 292 bases (Standard Deviation (SD) 96 bases) (Figure S4A). The insert size distribution of the 4000 base mate pair library has a median of 1133 bases (1460 bases SD) (Figure S4B). There were many mate-pair fragments with very small virtual inserts in this library.

### **Figure S5 Insert size estimation for Illumina libraries**

**A** Insert size distribution for the short-insert library. Left panel, left graph: read pairs mapping in the expected F-R orientation. Left panel, right graph: read pairs mapping in the unexpected R-F (mate) orientation. The right panel shows the same data with an expanded X-axis.

**B** Insert size distribution for the mate-pair library. Left panel, left graph: read pairs mapping in the unexpected F-R orientation. Left panel, right graph: read pairs mapping in the expected R-F (mate) orientation. The right panel shows the same data with an expanded X-axis.

A



B

