



**Supplemental Figure 1:** A comparison of mean expression levels for loci in the Smed GD 2.0 MAKER annotation with our new expression based annotation of the *S. mediterranea* asexual genome (Oxford). Expression value is mean estimated counts (from Kallisto output) per KB across 164 RNA-seq datasets. The graph shows cumulative percentages of annotations at a range of expression value thresholds for SmedGD MAKER annotations, Oxford annotations, SmedGD MAKER exclusive annotations, Oxford exclusive annotations and Oxford coding annotations predicted by Transdecoder. Loci in the Smed GD Maker annotation that are not included in the Oxford annotation have, on average, low expression values. Oxford-specific annotations incorporate a wider range of expression levels.