## Maternal Gastrointestinal Nematode Infection Up-regulates Expression of Genes Associated with Long-Term Potentiation in Perinatal Brains of Uninfected Developing Pups

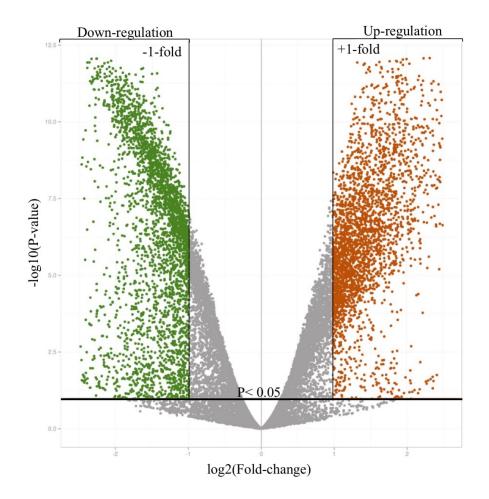
Manjurul Haque, Kristine G. Koski, Marilyn E. Scott\*

Phenotype Control Infection <sup>2</sup> Time E18 P2 Ρ7 0 -2

Supplementary Fig. 1

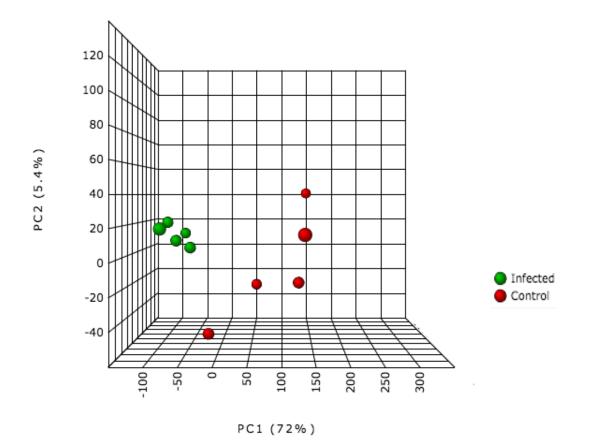
Heatmap showing the expression of all genes between control and infection groups over three time points, E18, P2 and P7.

## **Supplementary Fig. 2**



Volcano plot showing differentially expressed genes in postnatal day 7 pup brain in response to maternal nematode infection. The negative  $\log_{10}$  transformed *p* values test the null hypothesis of no difference in expression levels between control and infected pups (*y* axis) and are plotted against the average  $\log_2$  fold changes in expression (*x* axis). The up-regulated genes are plotted in brown and the down-regulated genes are plotted in green (*p* value <0.05) with an absolute  $\log_2$  fold change less than or equal to 1 or greater than 1, respectively.

## **Supplementary Fig. 3**



Principal component analysis showing clustering of maternal nematode infection replicates (green dots), indicating homogeneous effect of maternal nematode infection on the postnatal day 7 brain gene expression.