A gene expression microarray performed on *Entamoeba histolytica* trophozoites, which were sorted into a phagocytic and non-phagocytic fraction based on phagocytic competency, revealed 107 genes upregulated in the phagocytic population. This paper provides evidence that these 107 genes, which may be vital to parasite phagocytosis, are upregulated in response to phagocytosis stimuli.