## Figure S1





Figure S1. Characterization of DMOG treatment of BMDM and characterization of TB-lux expressing the *luxCDABE* operon. (A) HIF-1 $\alpha$  western blot at 12h post infection. IFN- $\gamma$  is at 1.25ng/ml (B) HIF-1 $\alpha$  western blot 12h post-infection of WT BMDM with IFN- $\gamma$  dose response (.05-1.25ng/ml) with and without addition of 200uM DMOG at the end of the 4hr phagocytosis (C) wildtype (Erdman) *M. tuberculosis* was compared to Erdman carrying a plasmid that constitutive-ly expresses the *luxCDABE* operon. Bacteria were seeded into 7H9 at an OD600 of 0.05. OD600 measurements were taken daily to demonstrate that expression of the *luxCDABE* operon does not inhibit growth. (D) BMDM were infected with different MOIs of bacteria expressing the *luxCDABE* operon. After a 4h phagocytosis, the infected macrophages were washed and media was replaced. Luminescence was measured, and subsequently the infected monolayers were lysed and plated for CFU.



**Figure S2.** HIF-1 $\alpha$  activates expression of glycolytic genes in *M. tuberculosis* infected macrophages. (A) Glycolysis pathway depicting metabolites (grey bubbles) and enzymes. (B) Heat map depicting relative expression data from RNA-seq. Wild-type (WT) is relative to uninfected; HIF-1 $\alpha$  deficient (Hif) is relative to the same condition in WT. glucose 6 phosphate (g6p), fructose 6 phosphate (f6p), fructose 2,6 bisphosphate (f2,6bp), fructose 1,6 bisphosphate (f1,6bp), dihydroxyacetone phosphate (dap), glyceraldehyde 3 phosphate (g3p) 1,3 bisphosphoglycerate (1,3bpg), 3-phosphoglycerate (3pg), 2-phosphoglycerate (2pg), phosphoenoylpyruvate (pep).



Figure S3. Steady state levels of glycolytic intermediates in cells infected with *M. tuberculosis*. Resting and IFN- $\gamma$  activated WT BMDM were infected with *M. tuberculosis* at MOI=1. Metabolite levels were measured using high-resolution tandem mass spectrometry in quintuplicate samples 24h post-in-fection and were normalized to an external control. Dihydroxyacetone phosphate (DHAP) and glyceral-dehyde-3-P are isomers that are indistinguishable by mass spectrometry and are represented as glycer-aldehyde-3-P. Error bars represent SEM. p-values were determined by unpaired t-test \*\*\*p≤0.001, \*\*p≤ 0.01.



**Figure S4. HIF-1** $\alpha$  **target genes are regulated** *in vivo* **after the onset of IFN-** $\gamma$ **.** CD11b+ cells were isolated from lungs of infected mice as in Figure 7 and analyzed by qPCR. (A-D) Timecourse of actin normalized expression of the indicated genes. WT is in black and HIF-1 $\alpha$ -/- is in red. p-values were determined using an unpaired t-test, \*\*\*p≤ 0.001, \*\*p≤0.01, \*p≤0.05.