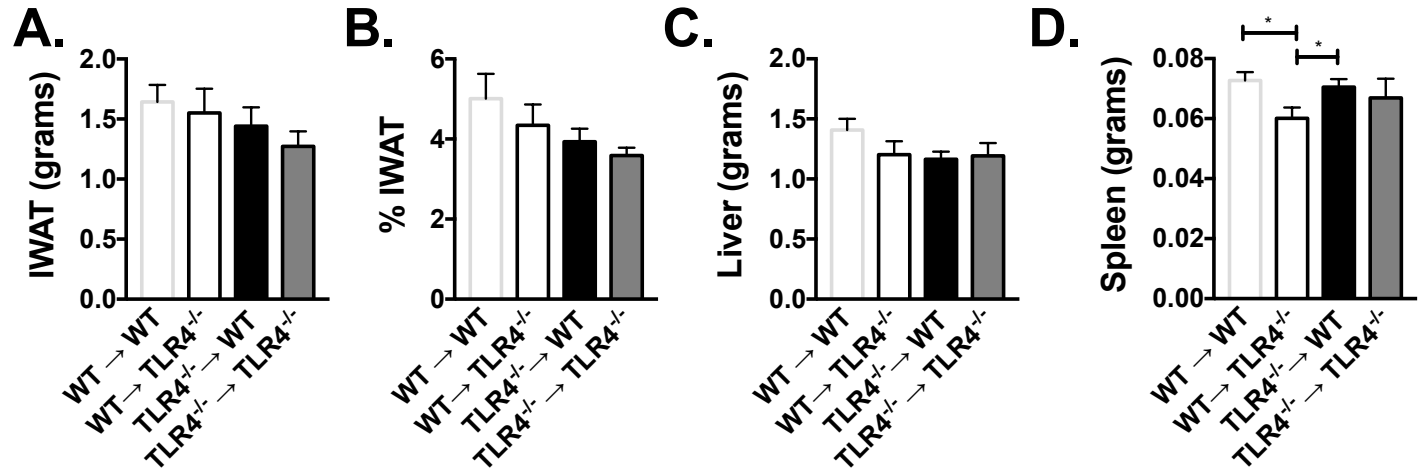


Supplementary Figure 1: Reciprocal BMTs demonstrate that hematopoietic *Tlr4*^{-/-} animals respond to high fat diet. WT and *Tlr4*^{-/-} C57Bl6/J male mice were irradiated at 8 weeks of age and then transplanted with marrow of the opposite genotype. WT marrow into *Tlr4*^{-/-} (WT→*Tlr4*^{-/-}) vs *Tlr4*^{-/-} marrow into WT mice (*Tlr4*^{-/-}→WT). 6 weeks after BMT animals were started on HFD and assessed after 16 weeks: (A) inguinal white adipose tissue (IWAT) weight, (B) % IWAT, (C) liver, (D) and spleen weight at 16 weeks of HFD. (H) GWAT adipocyte cross-sectional area distribution at 16 weeks of HFD. *p<0.05. N=6-8 in WT→WT and *Tlr4*^{-/-}→*Tlr4*^{-/-} and N=10-14 in WT→*Tlr4*^{-/-} and *Tlr4*^{-/-}→WT groups.

Supplementary Figure 2: Reciprocal BMT leukocyte and progenitor populations. (A) Blood flow cytometry evaluations 2 weeks post BMT (N=6-14 in WT→*Tlr4*^{-/-} and *Tlr4*^{-/-}→WT groups). (B) GWAT quantitative RT-PCR gene expression (N=5-10 in WT→*Tlr4*^{-/-} and N=6-8 in *Tlr4*^{-/-}→WT groups). (C) Flow cytometry analysis of BM leukocytes (N=6 in WT→*Tlr4*^{-/-} and N=8 in *Tlr4*^{-/-}→WT groups) (D) myeloid progenitors (N=11 in WT→*Tlr4*^{-/-} and N=13 in *Tlr4*^{-/-}→WT groups), (E) spleen and (F) blood leukocytes populations after 16 weeks of HFD (N=6 in WT→*Tlr4*^{-/-} and N=8 in *Tlr4*^{-/-}→WT groups). *p<0.05. **p<0.01, ***p<0.005, ****p<0.001,

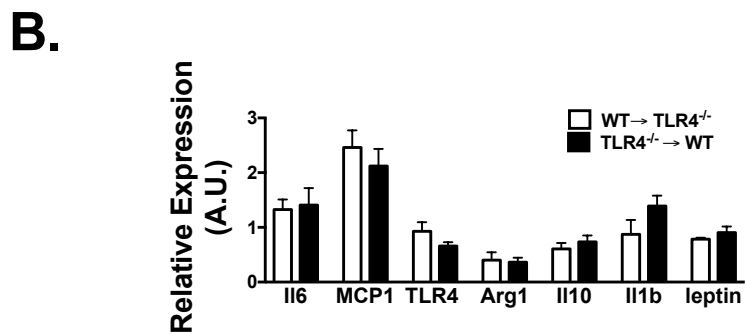
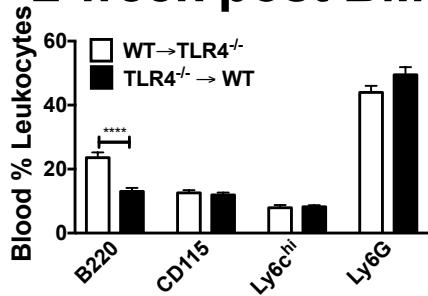
Supplementary Figure 3: Proliferation of ATM and DCs in WT and *Tlr4*^{-/-} animals. (A) Gating scheme and representative flow cytometry plots from 12-week-old ND or 2 week HFD challenged WT and *Tlr4*^{-/-} mice. WT and *Tlr4*^{-/-} animals were started on HFD at 6 weeks of age for 16 weeks. After 16 weeks (A) GWAT and (B) IWAT leukocyte populations were evaluated for Ki67 by flow cytometry. *p<0.05. **p<0.01, ***p<0.005, ****p<0.001. N=11 WT ND, N=9-10 *Tlr4*^{-/-} ND, N=11-12 WT HFD, and N=11-13 *Tlr4*^{-/-} HFD.

Supplementary Figure 4: WT, *Tlr4*^{-/-}, *Trif*^{-/-} and *Myd88*^{-/-} animals respond metabolically to HFD challenge. (A) 16 week fed insulin and (B) free fatty acids (FFA) and (C) liver triglycerides with (D) liver histology at 10 x (top panel) and 20 x (bottom panel). (N=12-16 in WT groups, N=10-11 in *Tlr4*^{-/-} groups, N=7-9 in *Trif*^{-/-}, and N=5-7 in *Myd88*^{-/-}, for liver triglycerides N=1 WT, N=15 *Tlr4*^{-/-} groups, N=3 *Trif*^{-/-}, and N=8 in *Myd88*^{-/-}) *p<0.05. **p<0.01, ***p<0.005, ****p<0.001. #p<0.05, ##p<0.01, ###p<0.005 when compared to WT ND or HFD control.

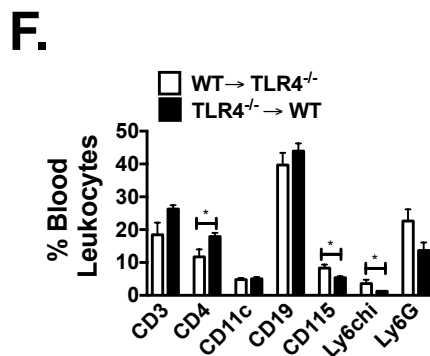
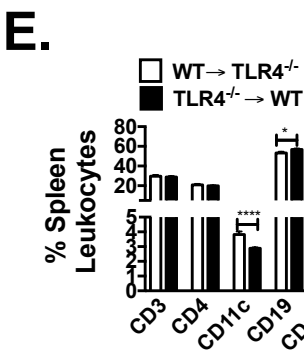
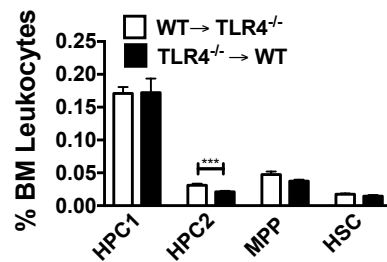
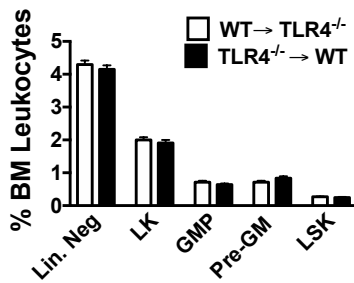
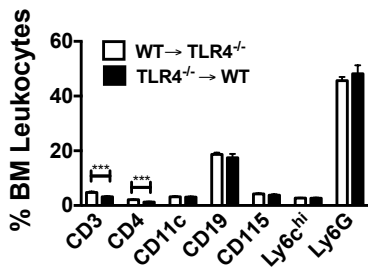


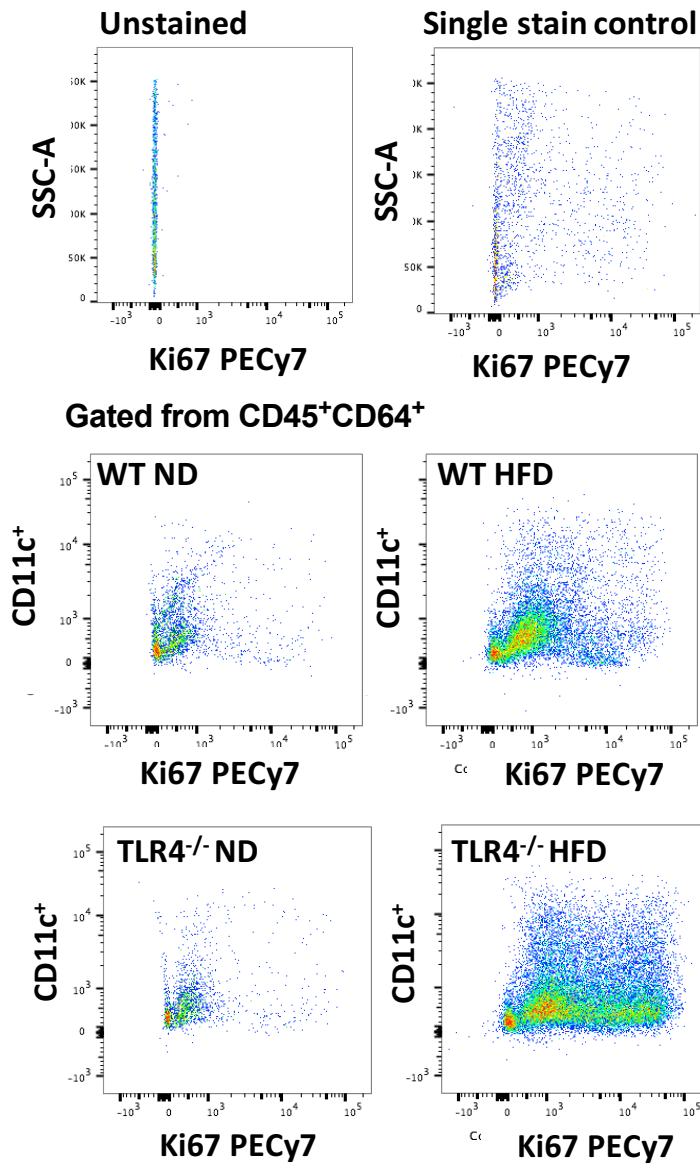
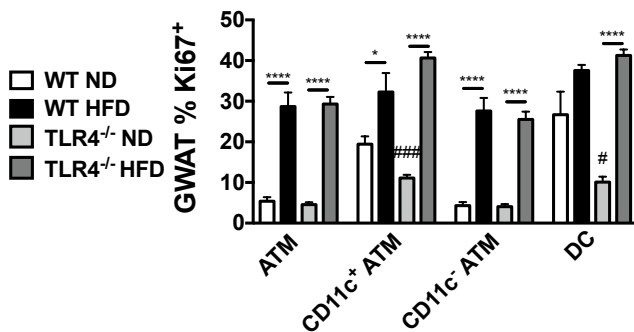
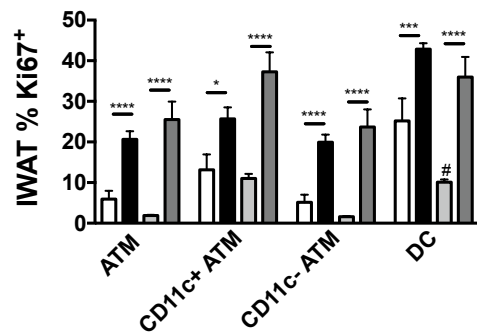
Supplementary Figure 1

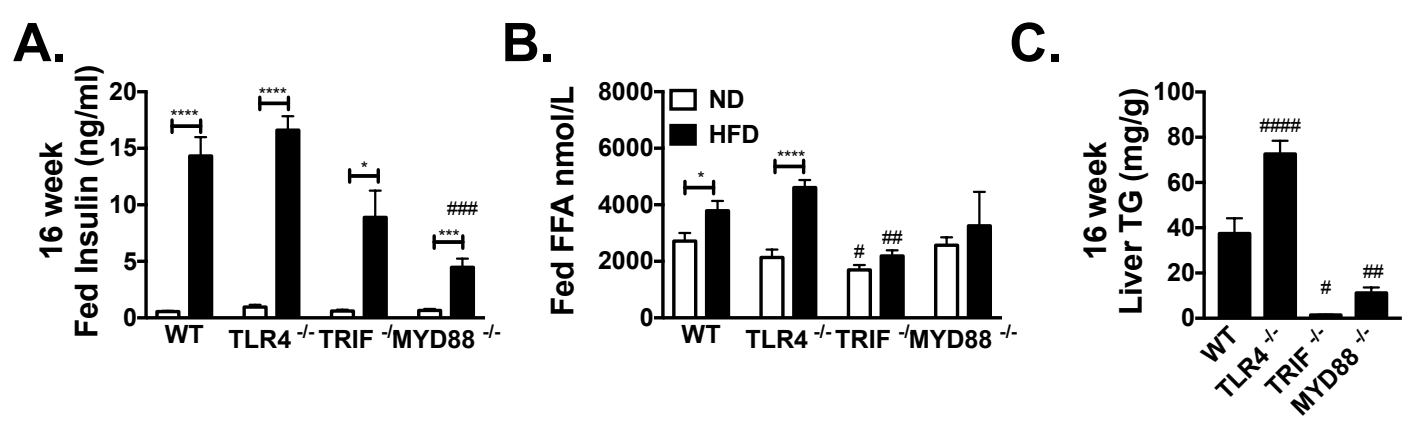
A. 2 week post BMT



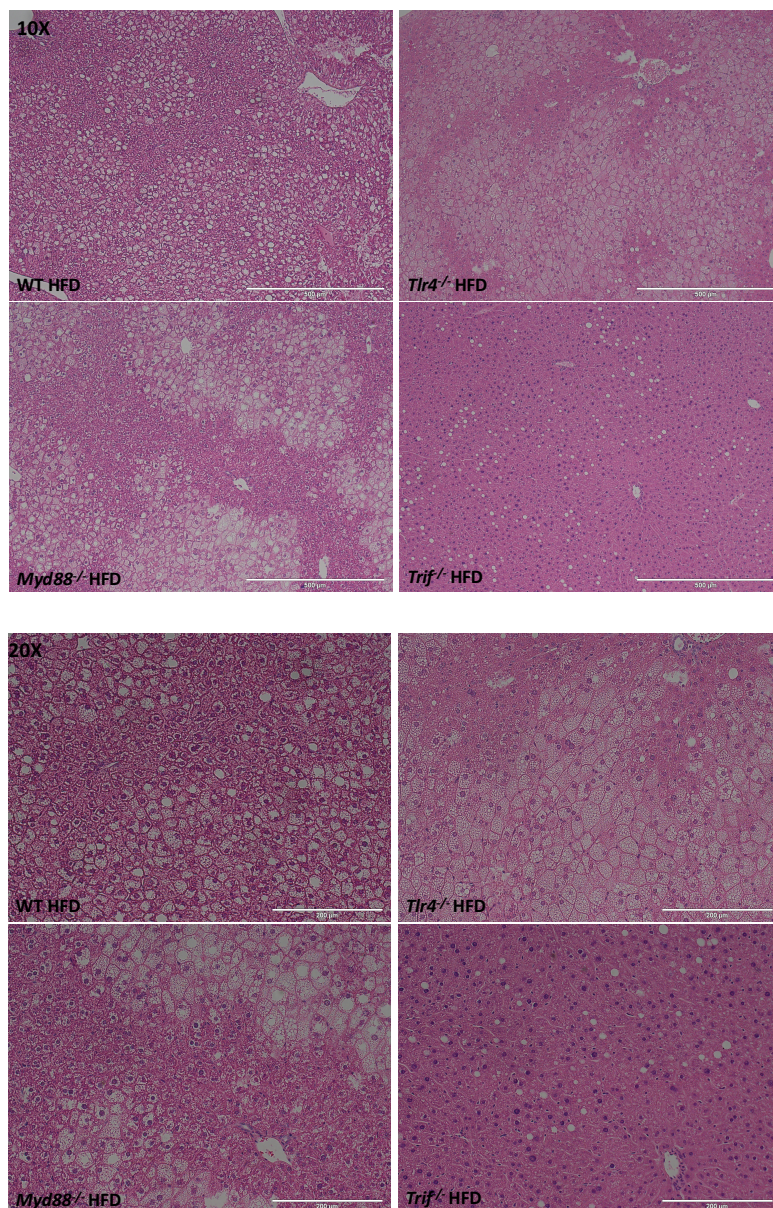
C. D.



A.**B.****C.**



D.



Supplementary Figure 4