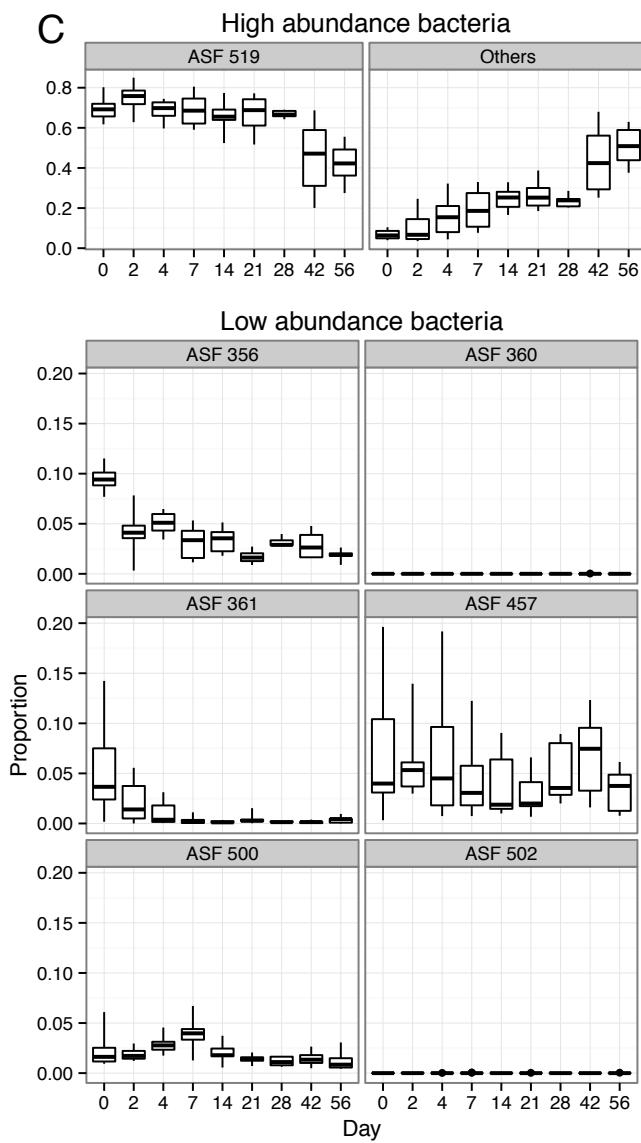
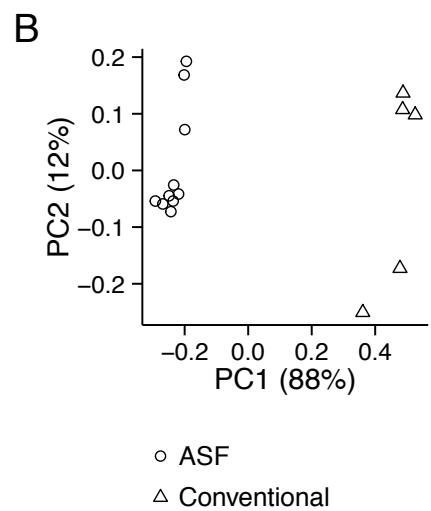
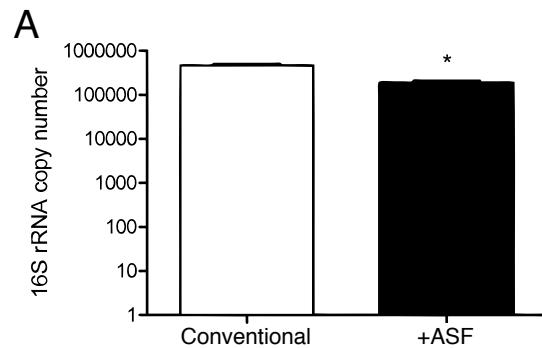
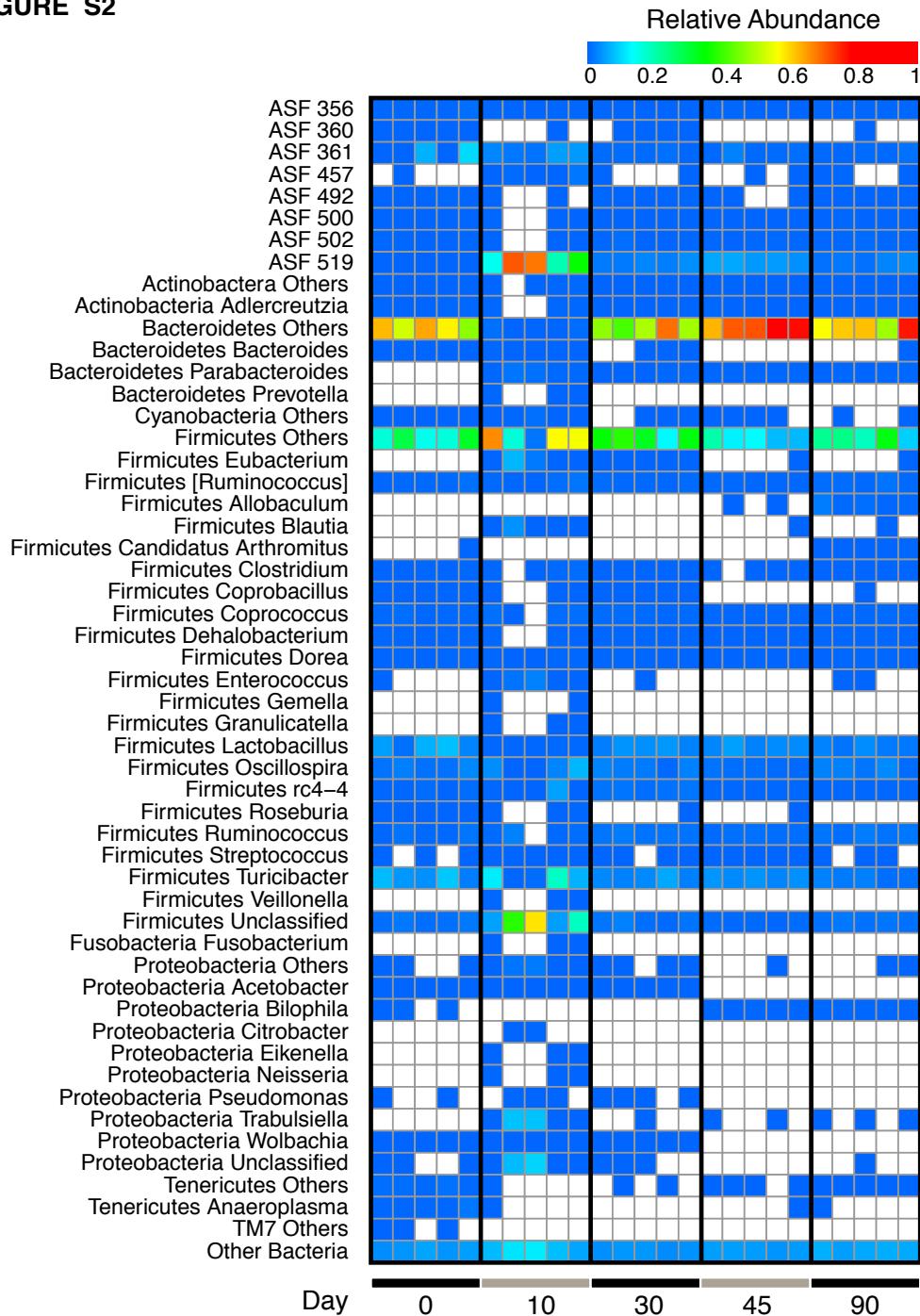


**Supplementary Figures:**

**Figure S1**

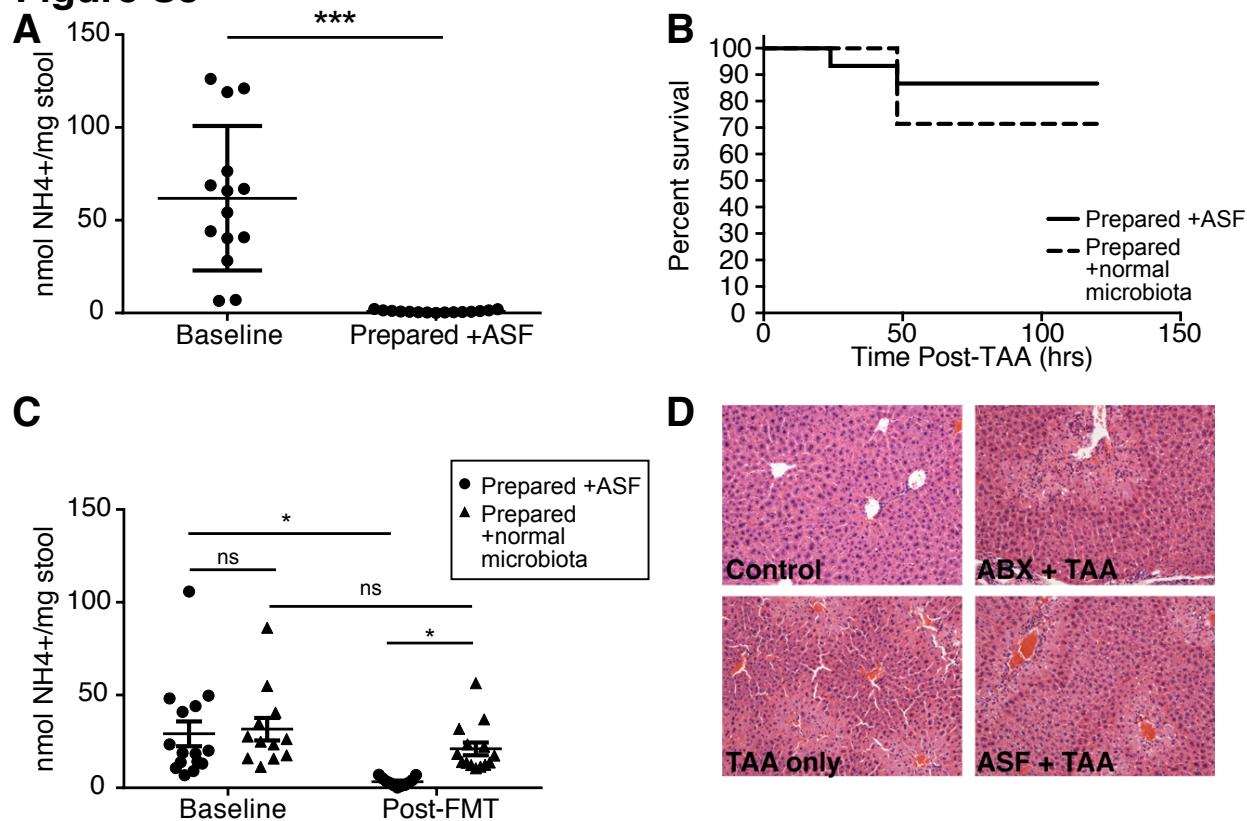


**Supplementary Figure 1.** Distinctiveness and long-term resiliency of the Altered Schaedler's Flora (ASF) in a host housed in a conventional specific pathogen free (SPF) environment. **(A)** 16S rRNA gene copy number of conventional (n=5) vs. ASF (n=10) fecal microbiota ( $p=0.015$ ). **(B)** PCoA ordination of conventional (n=5) vs. ASF (n=10) communities based on 16S rRNA gene sequence tags. **(C)** Relative abundance of individual ASF community members in mice (n=10) housed in a SPF environment over 2 months. Two-tailed Student's t-test.

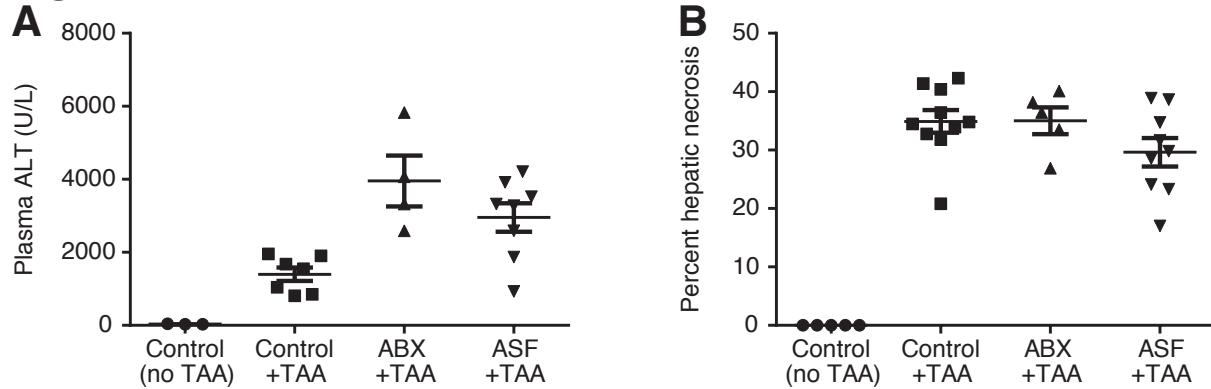
**FIGURE S2**

**Supplementary Figure 2.** Effect of a non-irradiated normal chow diet on ASF resilience after transplantation. Heat map showing the relative abundance of bacterial lineages over time in ASF-transplanted mice (n=5). Rows indicate bacterial lineages as annotated on the left. Relative abundance is indicated by the color code at the top of the figure, columns summarize sequencing results from individual fecal specimens, and elapsed time in days is shown along the bottom.

**Figure S3**



**Supplementary Figure 3.** Fecal ammonia levels, mortality rates and histology associated with TAA-induced hepatic injury studies. **(A)** Post-ASF transplant fecal ammonia levels in the high-dose TAA study shown in Figure 6A. **(B)** Kaplan-Meier survival curves and **(C)** fecal ammonia levels in the low-dose TAA study associated with results shown in Figure 7. **(D)** Photomicrographs of H&E stained hepatic sections from mice treated with high-dose TAA as indicated (200X) with quantification of hepatocellular necrosis (Supplementary Figure 4B). \*p<0.01, \*\*\*p<0.001. Two-tailed Student's t-test and paired-sample t-test.

**Figure S4**

**Supplementary Figure 4.** Differential liver injury do not explain differences with or without ASF transplantation. **(A)** Plasma alanine aminotransferase (ALT) levels in control, antibiotic-treated, or ASF-transplanted mice after TAA treatment compared to untreated control mice (n=3 in untreated control group, n=7 in control + TAA group, n=4 in ABX + TAA group, n=8 in ASF + TAA group). **(B)** Liver damage quantified histologically by a pathologist reported as percent hepatic cellular necrosis (n=5 each in untreated control group and ABX + TAA group, n=10 each in control + TAA group and ASF + TAA group; 10 random 200x HPF per liver, no statistically significant difference among the three TAA-treated groups by ANOVA; blinded analysis).