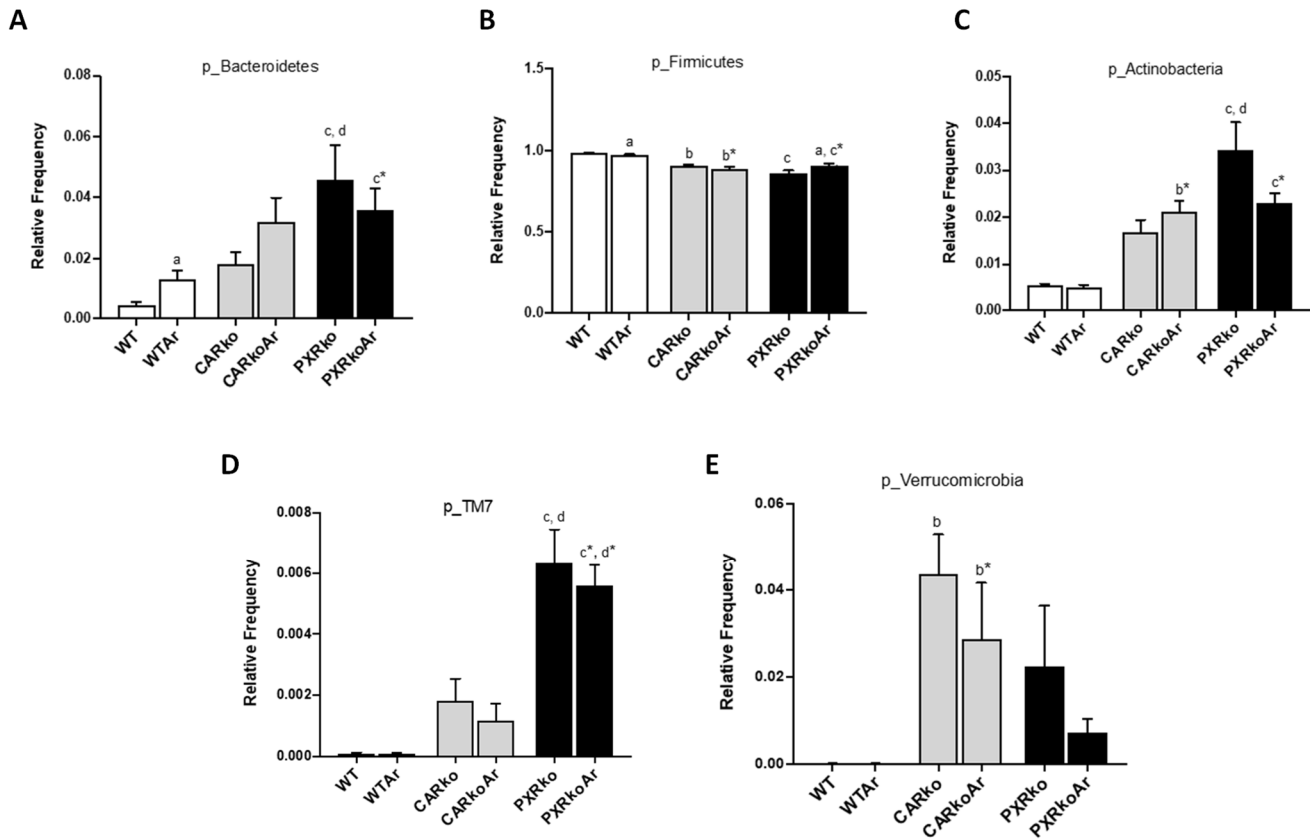


**Polychlorinated Biphenyls Altered Gut Microbiome in CAR and PXR Knockout  
Mice Exhibiting Toxicant-Associated Steatohepatitis**

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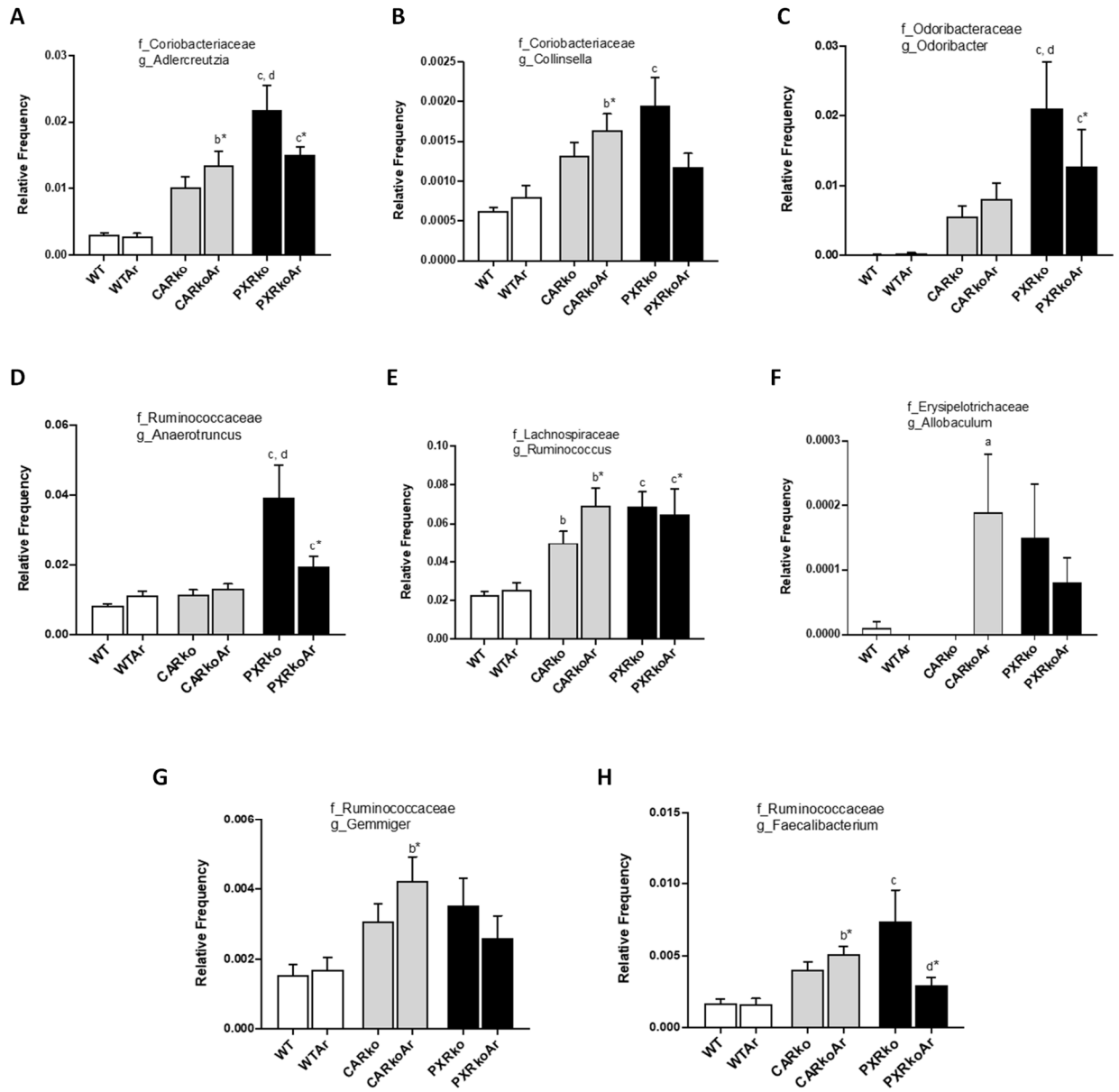
## Supplemental Figure 1



### Effects of Aroclor 1260, CAR and PXR on bacterial abundance at the phyla level.

The relative abundances of identified bacteria at the phyla level, namely (A) Bacteroidetes, (B) Firmicutes, (C) Actinobacteria, (D) TM7, and (E) Verrucomicrobia were plotted for the different groups. Values are mean  $\pm$  SEM,  $p < 0.05$ , a-  $\Delta$  due to Aroclor 1260 exposure within genotype, b, b\*-  $\Delta$  between WT and *Car*<sup>-/-</sup> without or with Aroclor 1260 exposure, c, c\*-  $\Delta$  between WT and *Pxr*<sup>-/-</sup> without or with Aroclor 1260 exposure, d, d\*-  $\Delta$  between *Car* and *Pxr* ablation without or with Aroclor 1260 exposure.

## Supplemental Figure 2

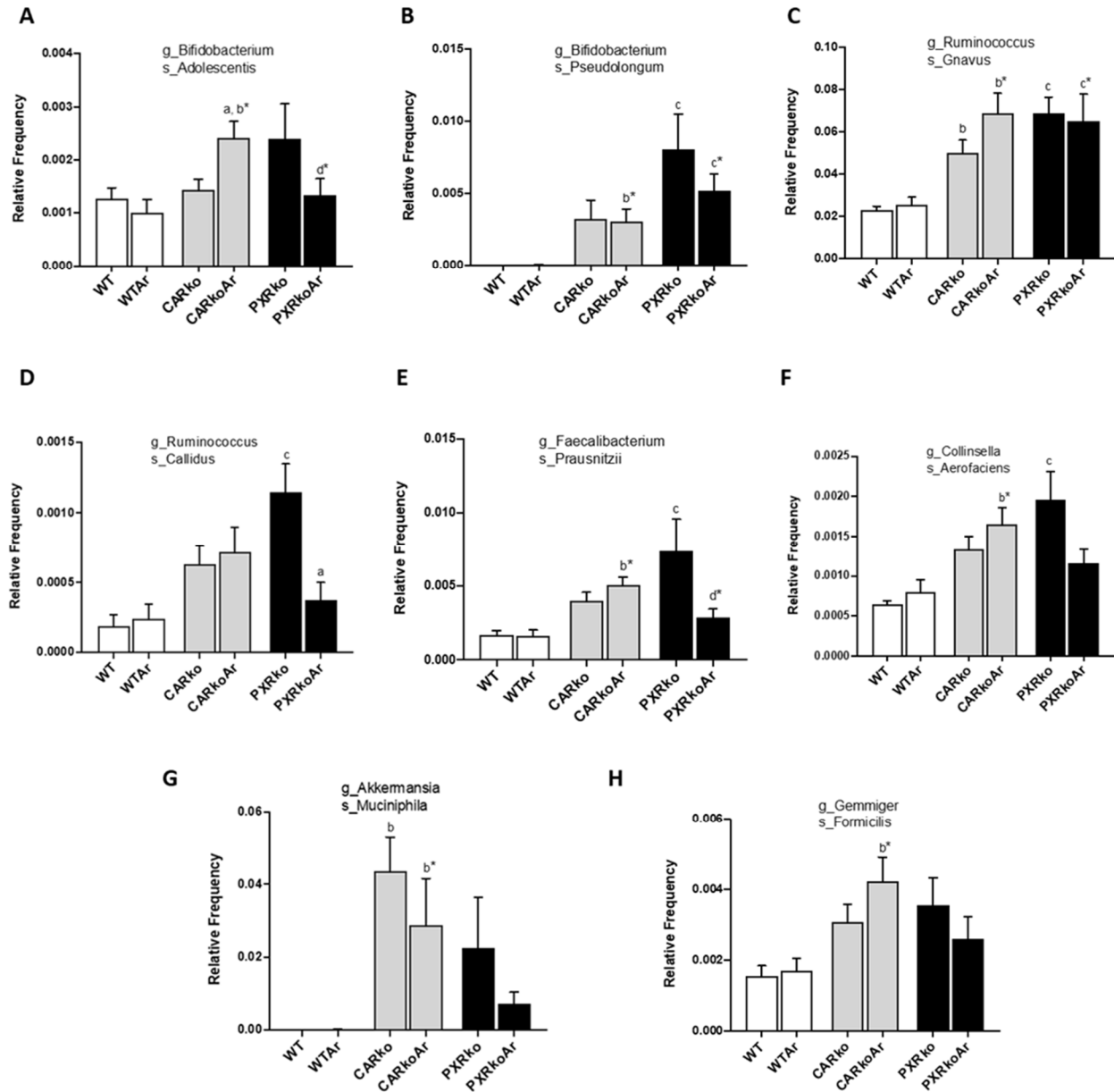


### Effects of Aroclor 1260, CAR and PXR on bacterial abundance at the genus level.

The relative abundances of identified bacteria at the genus level, namely (A) *Adlercreutzia*, (B) *Collinsella*, (C) *Odoribacter*, (D) *Anaerotruncus*, (E) *Ruminococcus*, (F) *Allobaculum*, (G) *Gemminger*, and (H) *Faecalibacterium* were plotted for the different

groups. Values are mean  $\pm$  SEM,  $p < 0.05$ , a-  $\Delta$  due to Aroclor 1260 exposure within genotype, b, b\* -  $\Delta$  between WT and *Car*<sup>-/-</sup> without or with Aroclor 1260 exposure, c, c\* -  $\Delta$  between WT and *Pxr*<sup>-/-</sup> without or with Aroclor 1260 exposure, d, d\* -  $\Delta$  between *Car* and *Pxr* ablation without or with Aroclor 1260 exposure.

### Supplemental Figure 3

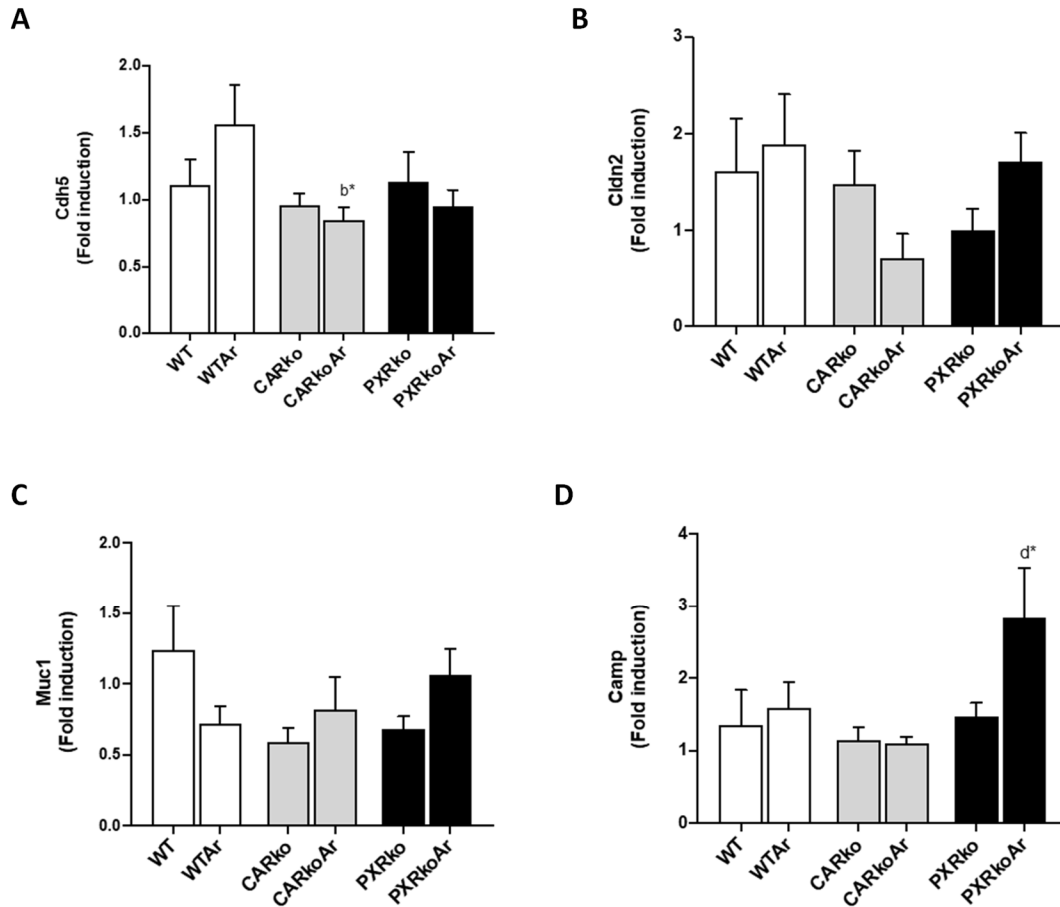


#### Effects of Aroclor1260, CAR and PXR on bacterial abundance at the species level.

The relative abundances of identified bacteria at the species level, namely (A) *B. Adolescentis*, (B) *B. Pseudolongum*, (C) *R. Gnavus*, (D) *R. Callidus*, (E) *F. Prausnitzii* (F) *C. Aerofaciens*, (G) *A. Muciniphila* and (H) *G. Formicilis* were plotted for the different

groups. Values are mean  $\pm$  SEM,  $p < 0.05$ , a-  $\Delta$  due to Aroclor1260 exposure within genotype, b, b\*-  $\Delta$  between WT and *Car*<sup>-/-</sup> without or with Aroclor1260 exposure, c, c\*-  $\Delta$  between WT and *Pxr*<sup>-/-</sup> without or with Aroclor1260 exposure, d, d\*-  $\Delta$  between *Car* and *Pxr* ablation without or with Aroclor1260 exposure.

## Supplemental Figure 4



**Aroclor 1260 and CAR/PXR ablation altered ileal gene expression.** Ileal mRNA levels for genes encoding proteins involved in maintenance of barrier integrity and intestinal inflammation/function including (A) *Cdh5*, (B) *Cldn2*, (C) *Muc1*, and (D) *Camp* were measured using RT-PCR. Values are mean  $\pm$  SEM,  $p < 0.05$ , a,  $\Delta$  due to Aroclor 1260 exposure within genotype, b, b\* -  $\Delta$  between WT and *Car*<sup>-/-</sup> without or with Aroclor 1260 exposure, c, c\* -  $\Delta$  between WT and *Pxr*<sup>-/-</sup> without or with Aroclor 1260 exposure, d, d\* -  $\Delta$  between *Car* and *Pxr* ablation without or with Aroclor 1260 exposure.