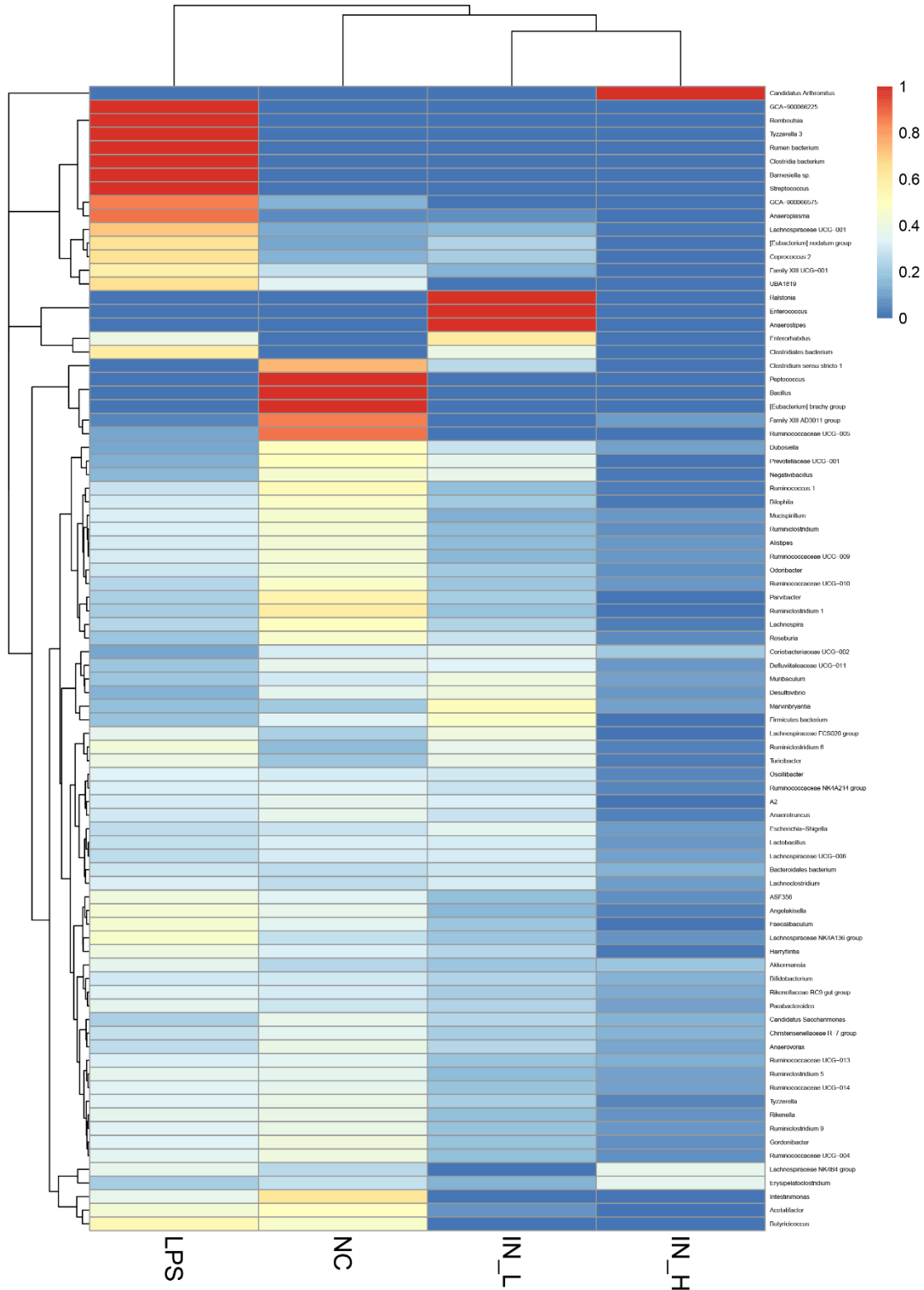
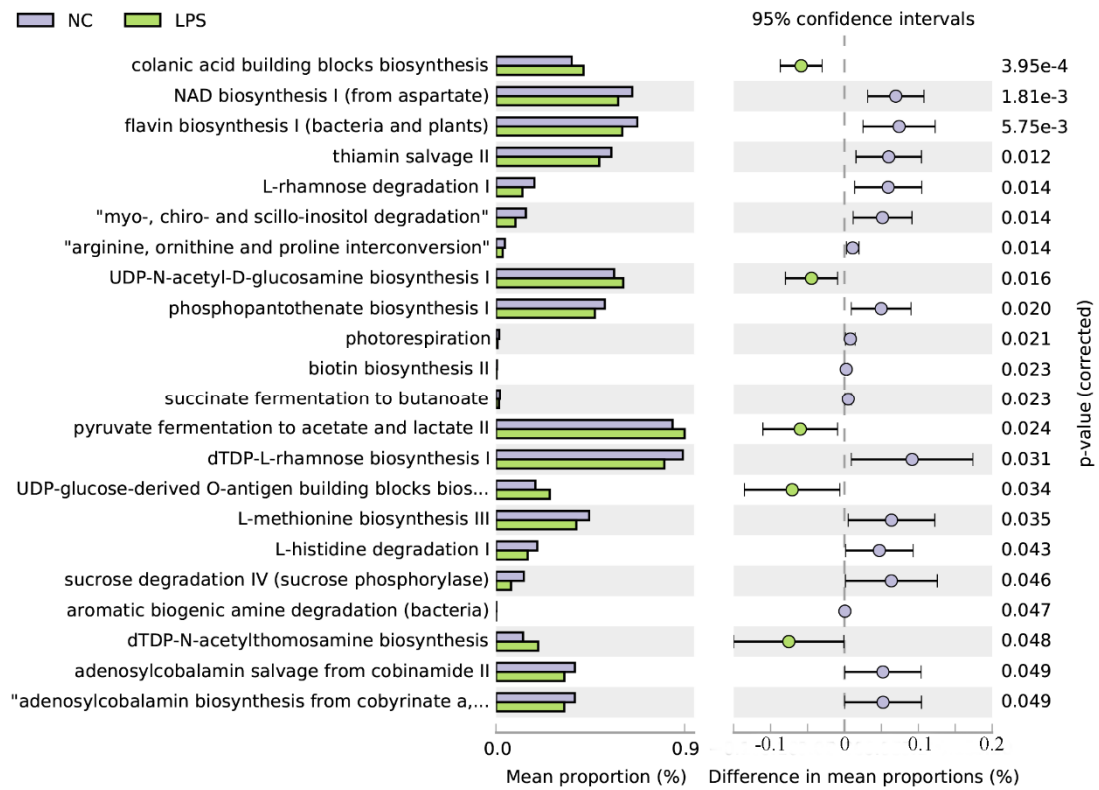


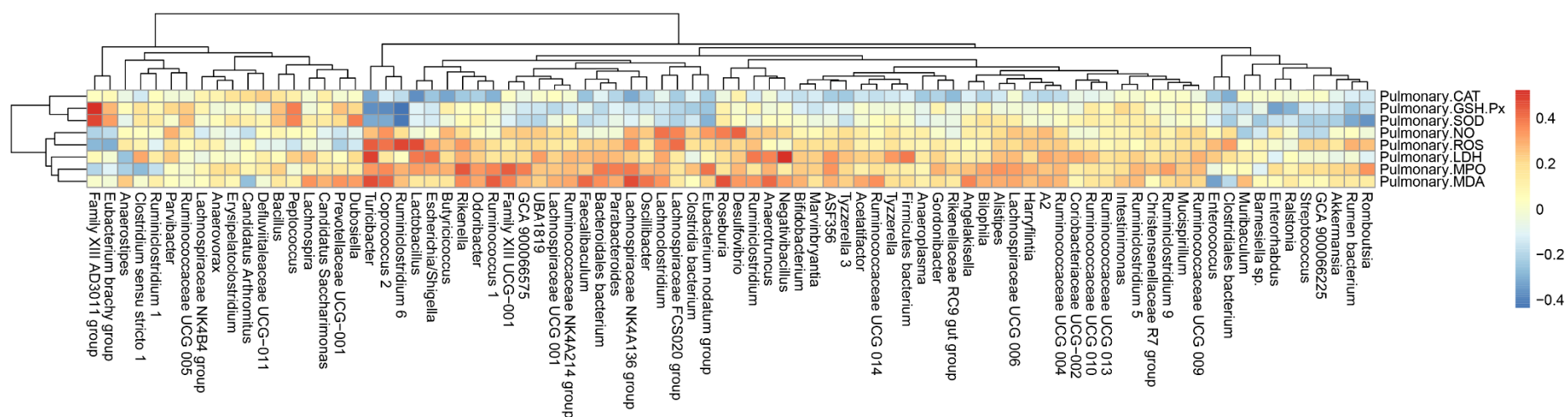
## Supplementary materials



**Figure S1** Heatmap of relative abundance at genus level.



**Figure S2** The remarkably differences of metabolic pathways between the LPS group and the IN-L group



**Figure S3** Heatmap of Spearman's correlations between the key intestinal microbial phylotypes and the parameters related to acute liver injury and inflammation.

**Table S1.** Primer sequences for quantitative real-time PCR of hepatic genes.

Primers	Forward Sequences (5'→3')	Reverse Sequences (5'→3')
TLR4	GGCAGCAGGTGGAATTGTAT	AGGCCCCAGAGTTTTGTTCT
MyD88	GTGCCGTCGGATGGTAGTG	GACAGTGATGAACCGCAGGAT
Akt	TCTACAACCAGGACCACGAGA	CTCCATGAGGATCAGCTCGAAC
Sirt1	AGAACCACCAAAGCGGAAA	TCCCACAGGAGACAGAAACC
Nfr2	CCTCCGCTGCCATCAGTCAGT	TCGGCTGGGACTCGTGTTCA
IKB $\alpha$	ACCAACCAGCCAGAAATCG	TCACAGGCAAGGTGTAGAGGG
NF- $\kappa$ B	CGCCCCTTATCGACCACC	CCTTCTCCCAAGAGTCGTCCA
COX2	GGGAGTCTGGAACATTGTGAA	GCACGTTGATTGTAGGTGGACTGT
HO-1	ACATCCAAGCCGAGAATGCTG	CCAGTGAGGCCCATACCAGA
TNF- $\alpha$	TCTTCTCATTCTGCTTGTGGC	ACTTGGTGGTTTGCTACGACG
IL-1 $\beta$	TCAAATCTCGCAGCAGCACATC	CGTCACACACCAGCAGGTTATC
IL-6	CCCCAATTTCCAATGCTCTCC	CGCACTAGGTTTGCCGAGTA