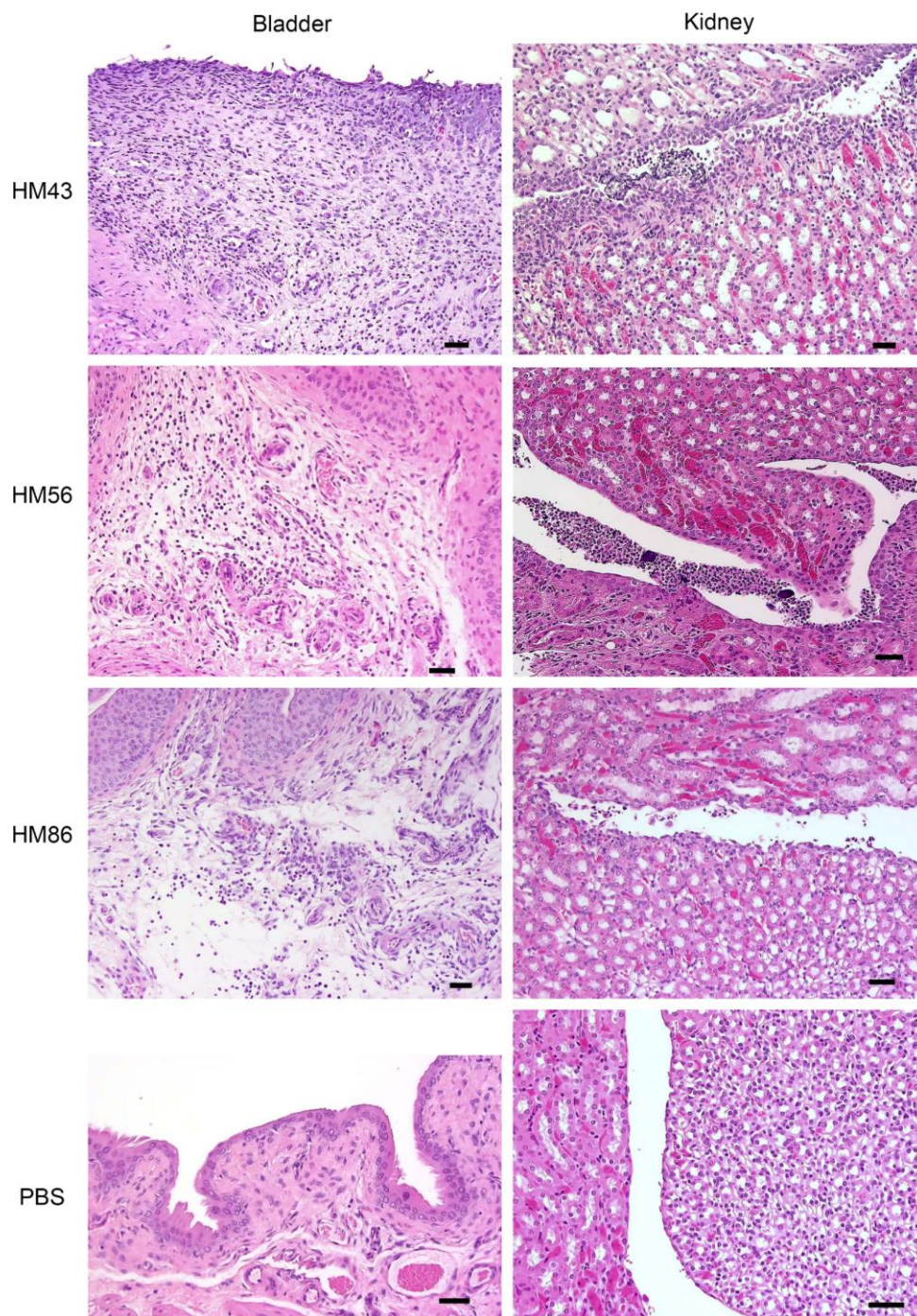
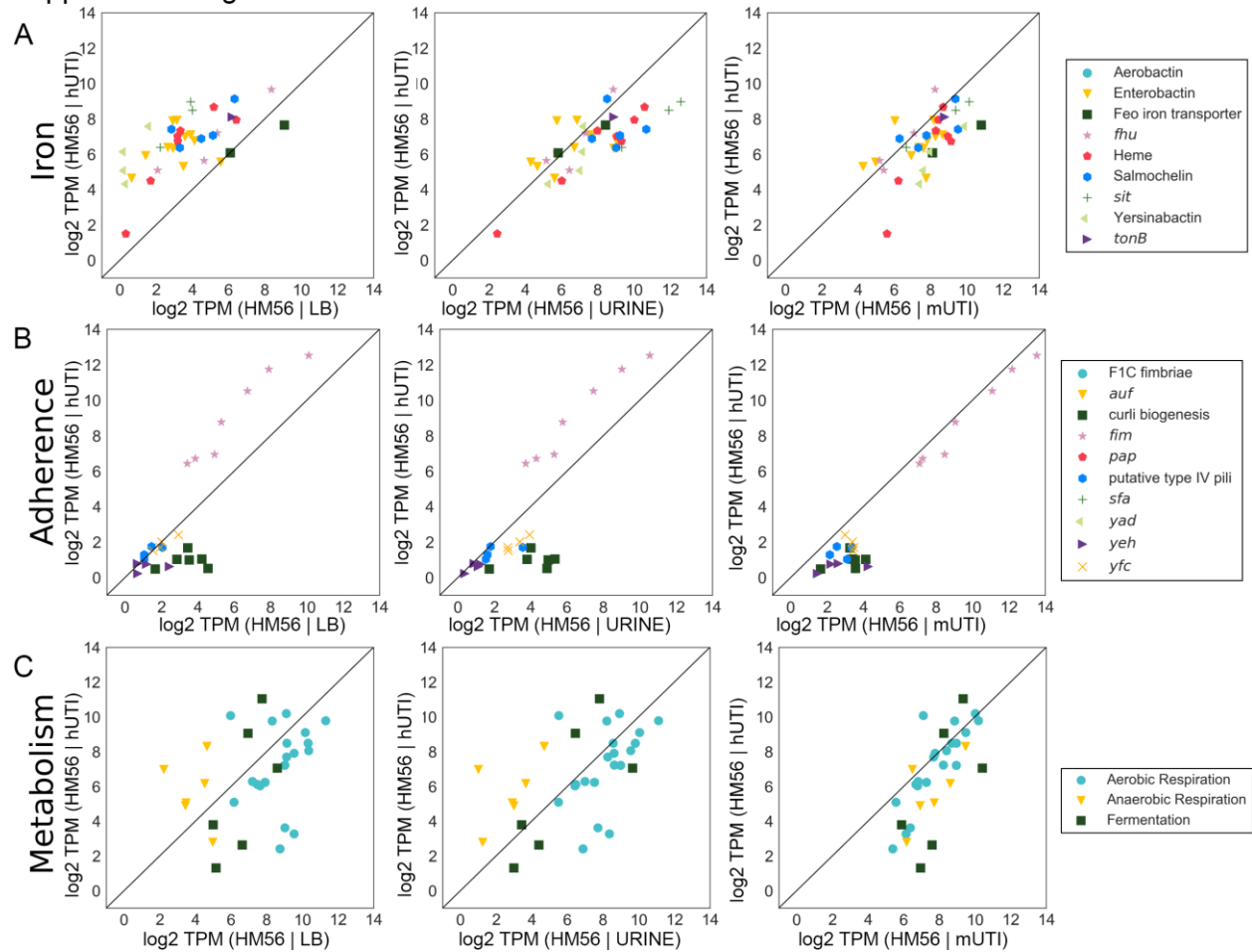


Supplemental Fig. 1



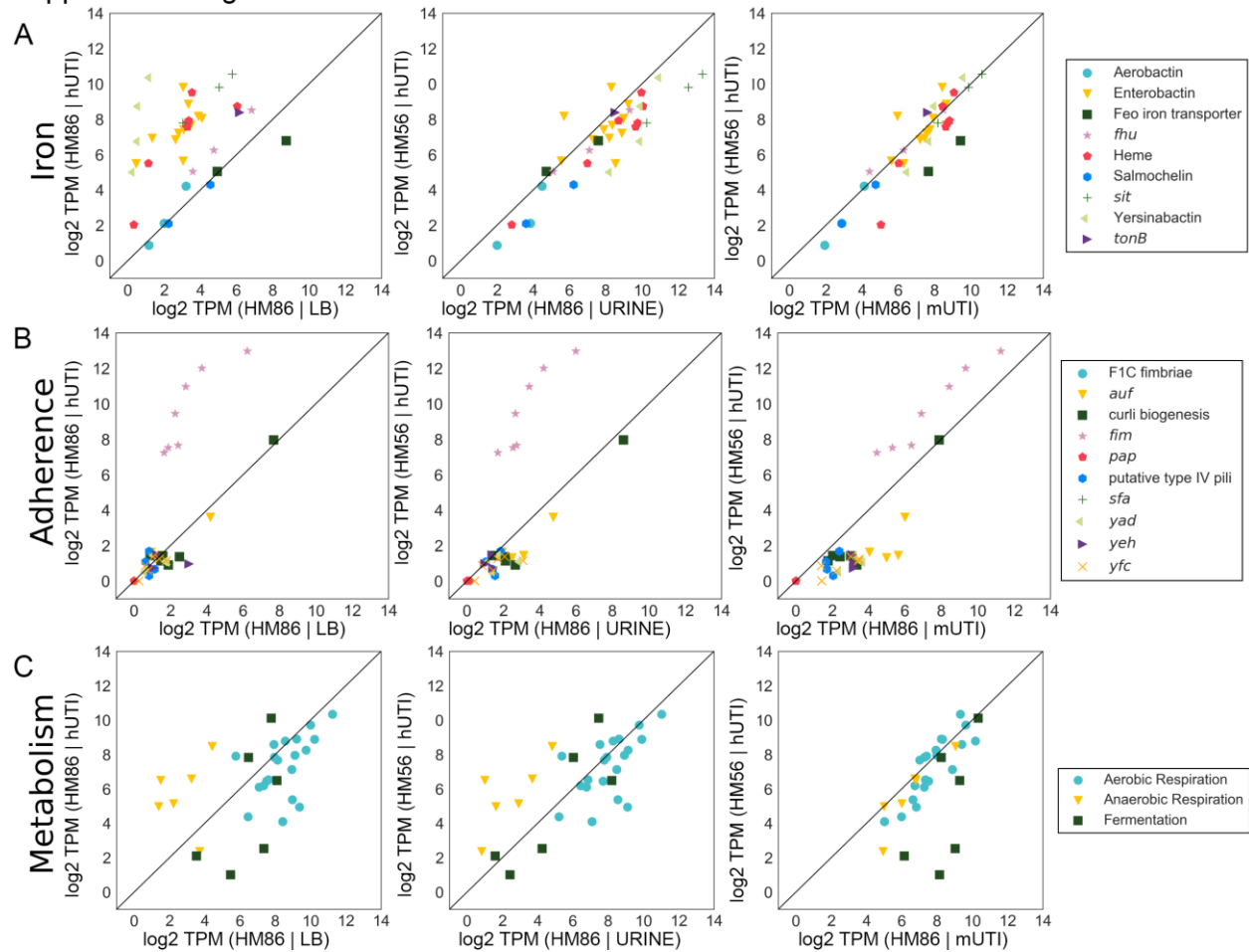
**Supplemental Figure 1. H&E stained thin sections of bladders and kidneys of infected mice.** Mice were infected with indicated UPEC strain (HM43, HM56 or HM86), or mock-infected with PBS. Bladder or kidney tissue was thin-sectioned and stained with H&E. Scale bar indicates 40  $\mu\text{m}$ .

Supplemental Fig.2



**Supplemental Figure 2. Gene expression of virulence factors as well as metabolic machinery is highly consistent between mouse model of UTI and human UTI in strain HM56.** Gene expression of iron acquisition operons (A), adherence genes (B), and metabolic pathways (C) for HM56 was compared between LB and human infection (LB vs hUTI), urine and human infection (urine vs hUTI), and mouse UTI and human UTI (mUTI vs hUTI).

Supplemental Fig.3



**Supplemental Figure 3. Gene expression of virulence factors as well as metabolic machinery is highly consistent between mouse model of UTI and human UTI strain HM86.** Gene expression of iron acquisition operons (A), adherence genes (B), and metabolic pathways (C) for HM86 was compared between LB and human infection (LB vs hUTI), urine and human infection (urine vs hUTI), and mouse UTI and human UTI (mUTI vs hUTI).