

Tables

Supplementary Table 1: Genera in common between mice and humans gut microbiota. Top 10 most abundant genera present in at least 1 of the 4 human studies (Consortium, 2012; Yatsunenکو et al., 2012; left column) and 1 of the 5 mouse gut microbiota datasets (Nagy-Szakal et al., 2012; Riboulet-Bisson et al., 2012; Ubeda et al., 2013; Ward et al., 2012; Zenewicz et al., 2013; right column) that were used for the analysis reported in Figure 3. Genera with significantly different abundances between human and mouse datasets are indicated with an asterisk (Wilcoxon p-value <0.05), but note that none are significant after multiple testing correction. Low-abundance genera with significantly different abundances between human and mouse datasets are listed below. For each dataset, genus abundances were normalized to the most abundant genus (100%). The mean relative abundance of each genus was calculated as its average relative abundance in all the datasets in which the genus was detected.

Mouse TOP 10			Human TOP 10		
Genus	Mean relative abundance (%)		Genus	Mean relative abundance (%)	
	mice	humans		mice	humans
<i>Lactobacillus</i> *	63.136	0.047	<i>Prevotella</i>	0.869	51.672
<i>Clostridium</i>	32.243	22.072	<i>Faecalibacterium</i> *	0.271	49.409
<i>Bacteroides</i>	25.412	37.475	<i>Bacteroides</i>	25.412	37.475
<i>Alistipes</i>	25.241	7.554	<i>Ruminococcus</i> *	1.977	26.270
<i>Turicibacter</i> *	22.553	0.222	<i>Clostridium</i>	32.243	22.072
<i>Blautia</i>	15.047	20.266	<i>Blautia</i>	15.047	20.266
<i>Eubacterium</i>	8.944	9.472	<i>Roseburia</i>	3.915	18.156
<i>Parabacteroides</i>	7.478	5.249	<i>Coprococcus</i>	1.931	11.972
<i>Tannerella</i>	5.320	0.001	<i>Eubacterium</i>	8.944	9.472
<i>Roseburia</i>	3.915	18.156	<i>Oscillospira</i> *	1.075	7.708
Low-abundance genera with significant abundance difference between humans and mice					
	mice	humans		mice	humans
<i>Catenibacterium</i> *	0.031	0.874	<i>Akkermansia</i> *	0.003	0.744
<i>Lachnospira</i> *	0.230	3.502	<i>Haemophilus</i> *	0.002	0.028
<i>Streptococcus</i> *	0.066	0.962	<i>Klebsiella</i> *	0.002	0.840
<i>Catenibacterium</i> *	0.031	0.874	<i>Dialister</i> *	0.002	3.856

Supplementary Table 2: Alphabetical list of mouse- and human-specific gut-associated genera. Data was extracted from the same four human studies used for Figure 3 and Supplementary Table 1 (Consortium, 2012; Yatsunenکو et al., 2012) and six mouse studies used for Figure 3B (Cho et al., 2012; Nagy-Szakal et al., 2012; Riboulet-Bisson et al., 2012; Ubeda et al., 2013; Ward et al., 2012; Zenewicz et al., 2013). Genera with less than 0.1% relative abundance were excluded. Genera with significantly different abundances between the human and mouse datasets (referenced in Supplementary Table 1) are indicated with an asterisk (Wilcoxon p-value <0.05), but note that none is significant after multiple testing correction.

Mouse-specific			Human-specific
Genera	Genera (cont.)	Genera (cont.)	Genera
<i>Acetanaerobacterium</i>	<i>Croceibacter</i>	<i>Oscillibacter</i>	<i>Acidaminococcus</i>
<i>Acetitomaculum</i>	<i>Curvibacter</i>	<i>Paludibacter</i>	<i>Adlercreutzia</i> *
<i>Aeromicrobium</i>	<i>Cytophaga</i>	<i>Papillibacter</i>	<i>Bilophila</i> *
<i>Alkaliphilus</i>	<i>Cytophagaceae</i>	<i>Parasporobacterium</i>	<i>Bulleidia</i> *
<i>Allobaculum</i> *	<i>Desulfonispota</i>	<i>Pelagibacter</i>	<i>Collinsella</i> *
<i>Anaerobacter</i>	<i>Donghicola</i>	<i>Petrimonas</i>	<i>Erwinia</i> *
<i>Anaerophaga</i>	<i>Erysipelothrix</i>	<i>Rhodovulum</i>	<i>Methanobrevibacter</i> *
<i>Anaeroplasma</i>	<i>Eubacteriaceae</i>	<i>Rikenella</i>	<i>Odoribacter</i> *
<i>Anaerosporobacter</i>	<i>Guggenheimella</i>	<i>Roseobacter</i>	<i>Phascolarctobacterium</i>
<i>Anaerovorax</i> *	<i>Hespellia</i>	<i>Ruminococcaceae I.S</i>	<i>Sutterella</i> *
<i>Arthromitus</i>	<i>Johnsonella</i>	<i>Shigella</i>	<i>Veillonella</i> *
<i>Bryantella</i>	<i>Lachnospiraceae</i>	<i>Sporacetigenium</i>	
<i>Butyricoccus</i>	<i>Lachnospiraceae (IS)</i>	<i>Sporobacter</i>	
<i>Caminicella</i>	<i>Leifsonia</i>	<i>Sporobacterium</i>	
<i>Catonella</i>	<i>Longispora</i>	<i>Syntrophococcus</i>	
<i>Clostridiaceae</i>	<i>Marvinbryantia</i>	<i>Tessaracoccus</i>	
<i>Clostridiales</i>	<i>Mucispirillum</i>	<i>TM7 genera I.S</i>	