

Table S4 Inter-Facility taxonomy statistics

HSCR Dataset				Mean Relative Abundance	Kruskal- Wallis	Pairwise Wilcoxon
Colon Samples						
Association		Taxonomic Classification				
Facility	Group	Rank	Taxon		<i>P</i>	<i>P</i>
Laramie	P07-WT	Phylum	Actinobacteria	19%	0.011	NS
			Proteobacteria	46%	0.019	NS
		Family	Enterobacteriaceae	35%	0.006	NS
		Genus	<i>Propionibacterium</i>	11%	0.002	0.038
Boston	P07-WT	Phylum	Firmicutes	89%	0.013	NS
Laramie	P20-WT	Order	Bacteroidales	12%	0.003	0.023
		Genus	<i>Bacteroides</i>	25%	0.005	0.023
			<i>Parabacteroides</i>	9%	0.006	0.023
Boston	P20-WT	Phylum	Firmicutes	73%	0.048	NS
		Family	Ruminococcaceae	6%	0.048	NS
		Genus	<i>Oscillospira</i>	8%	0.011	0.046
Laramie	P24-WT	Genus	<i>Bacteroides</i>	20%	0.025	0.041
Laramie	P07-KO	Phylum	Actinobacteria	7%	0.020	NS
			Proteobacteria	58%	0.016	NS
		Family	Enterobacteriaceae	54%	0.005	NS
Boston	P07-KO	Phylum	Firmicutes	99%	0.009	NS
Laramie	P20-KO	Phylum	Bacteroidetes	77%	NS	0.045
		Order	Bacteroidales	14%	0.003	0.023
			Bacteroidales.1	8%	0.003	0.023
			<i>Bacteroides</i>	34%	0.005	0.023
		Genus	<i>Parabacteroides</i>	7%	0.006	0.023
			S24-7	42%	0.042	NS
Boston	P20-KO	Family	S24-7	42%	0.042	NS
Laramie	P24-KO	Genus	<i>Bacteroides</i>	37%	0.009	NS
			<i>Parabacteroides</i>	12%	0.016	NS
C57BL6/J Dataset						
Laramie		Phylum	Firmicutes	39%	0.010	0.011
Boston		Phylum	Bacteroidetes	76%	0.028	0.031

Only those taxa with mean relative abundances above 6% and that exhibited significant differences between age- and genotype-matched Boston and Laramie mice are shown.