

Additional Table 4 Training and test agreement for the SVM binary models: proportion of agreement, Cohen's kappa and Pearson r between the 16S and shotgun models output. Statistically significant Cohen's kappa and Pearson r are highlighted in **bold**.

Models	Agreement		Kappa		Pearson r		
	Training	Test	Training	Test	Training	Test	
Species	Control vs HRL	0.71	0.60	0.43 (0.28, 0.59)	0.23 (-0.09, 0.55)	0.50 (0.36, 0.62)	0.40 (0.05, 0.67)
	Control vs CRC	0.85	0.77	0.69 (0.56, 0.82)	0.47 (0.14, 0.80)	0.79 (0.72, 0.85)	0.46 (0.12, 0.70)
	HRL vs CRC	0.72	0.67	0.38 (0.21, 0.55)	0.29 (-0.06, 0.63)	0.62 (0.50, 0.72)	0.19 (-0.18, 0.52)
Genus	Control vs HRL	0.66	0.60	0.34 (0.19, 0.49)	0.23 (-0.09, 0.54)	0.46 (0.31, 0.59)	0.44 (0.09, 0.69)
	Control vs CRC	0.75	0.77	0.45 (0.29, 0.61)	0.31 (-0.08, 0.71)	0.714 (0.62, 0.79)	0.38 (0.03, 0.65)
	HRL vs CRC	0.71	0.73	0.34 (0.16, 0.51)	0.38 (0.04, 0.72)	0.60 (0.47, 0.70)	0.23 (-0.14, 0.55)
Family	Control vs HRL	0.67	0.67	0.34 (0.18, 0.50)	0.34 (0.003, 0.67)	0.38 (0.22, 0.52)	0.44 (0.09, 0.69)
	Control vs CRC	0.75	0.77	0.38 (0.20, 0.55)	0.22 (-0.19, 0.64)	0.69 (0.59, 0.78)	0.25 (-0.12, 0.56)
	HRL vs CRC	0.67	0.70	0.24 (0.06, 0.41)	0.31 (-0.003, 0.62)	0.52 (0.38, 0.64)	0.13 (-0.24, 0.47)