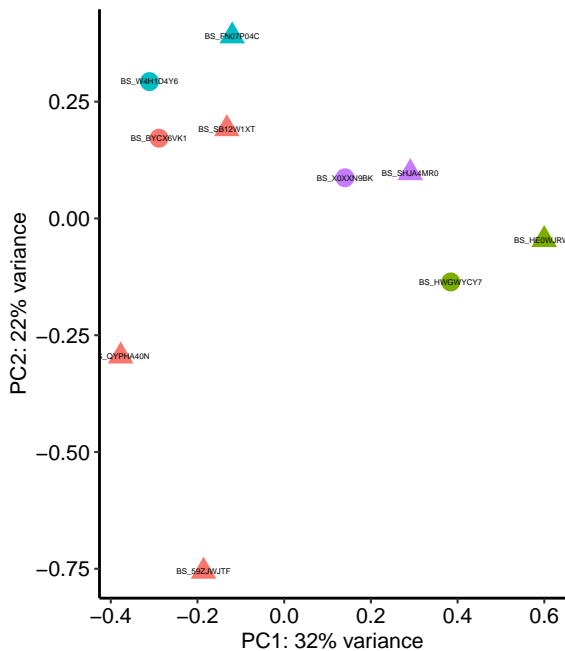
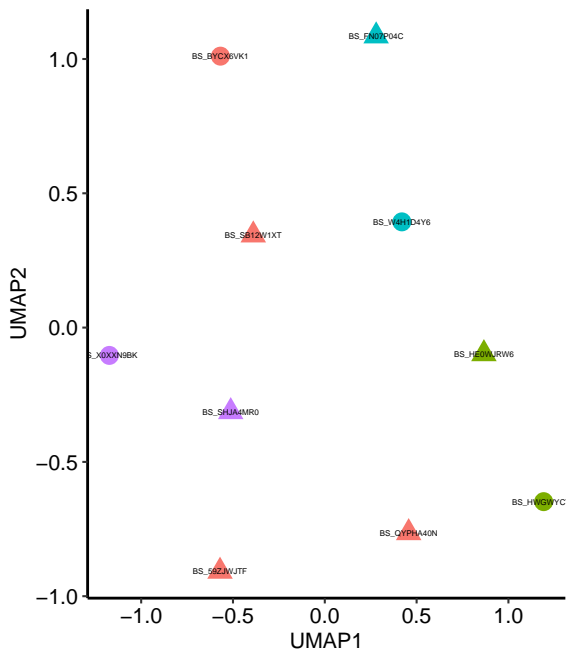


PCA: RUVg output (k = 1)

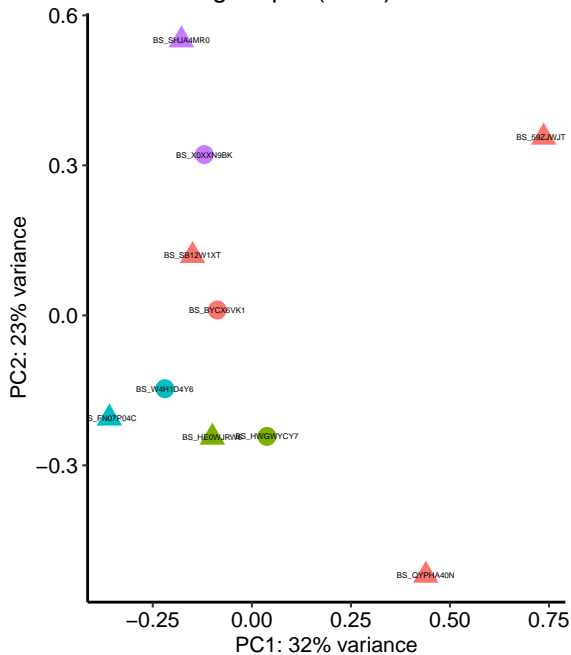


UMAP: RUVg output (k = 1)

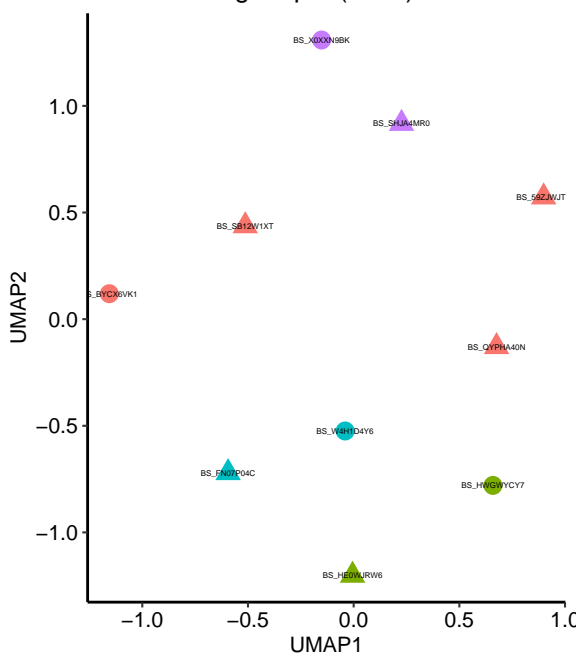


rna\_library    ●    poly-A    ▲    stranded

PCA: RUVg output (k = 2)

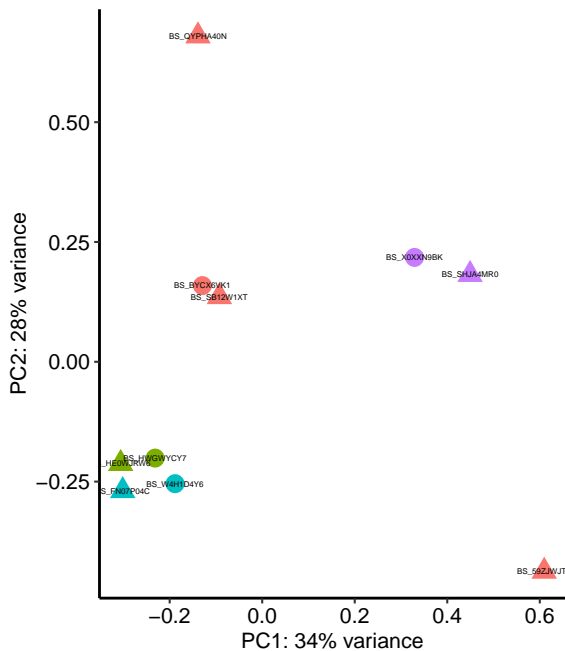


UMAP: RUVg output (k = 2)

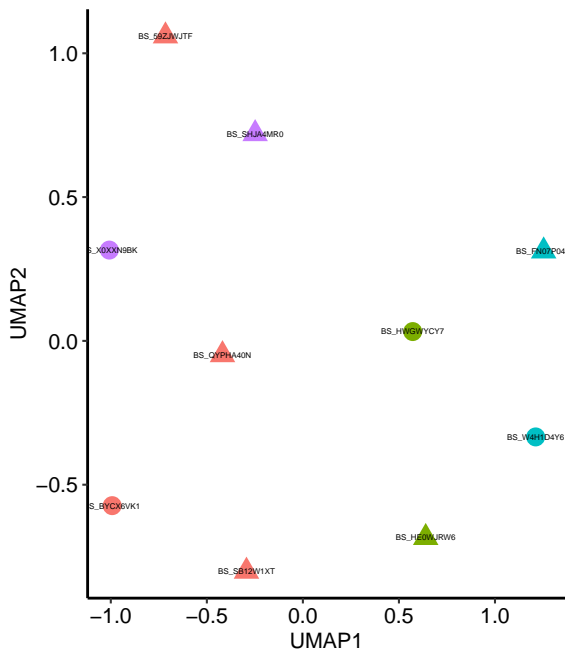


rna\_library    ●    poly-A    ▲    stranded

PCA: RUVg output (k = 3)



UMAP: RUVg output (k = 3)



rna\_library ● poly-A ▲ stranded

PCA plot showing the separation of bacterial strains based on PC1 (44% variance) and PC2 (22% variance). The x-axis is labeled "PC1: 44% variance" and the y-axis is labeled "PC2: 22% variance". The plot shows distinct clusters of strains corresponding to different treatment groups, indicated by color and shape: Red (Control), Green (Low), Purple (Medium), and Cyan (High).

Strain	Treatment Group	PC1 (approx.)	PC2 (approx.)
BS_OYPA40N	Control	-0.65	0.65
BS_FN07C04C	High	0.05	0.55
BS_V44WD4Y6	High	0.15	0.50
BS_X0XXN9BK	Medium	-0.05	0.45
BS_H1WGWYC7	Low	0.05	0.35
BS_H2C0URW6	Low	0.00	0.30
BS_SHU4MR0	Medium	0.10	0.20
BS_BYC6VK1	Control	-0.25	-0.25
BS_S812W1XT	Control	-0.15	-0.45
BS_56ZJWJT	Control	0.65	0.55

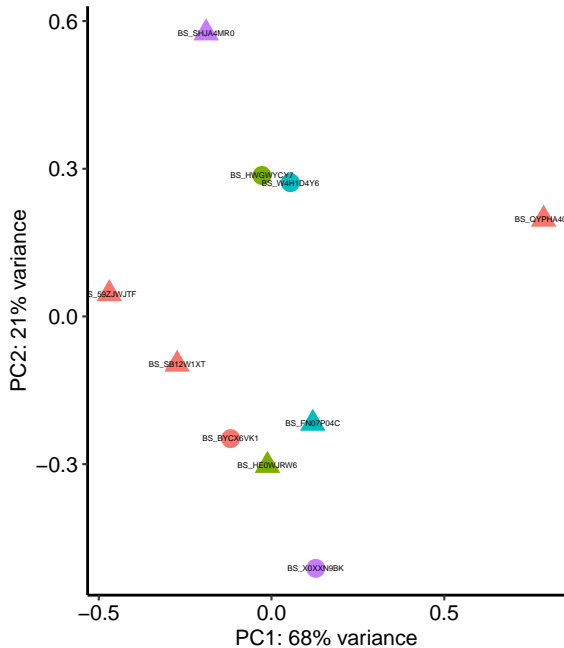
UMAP2

UMAP1

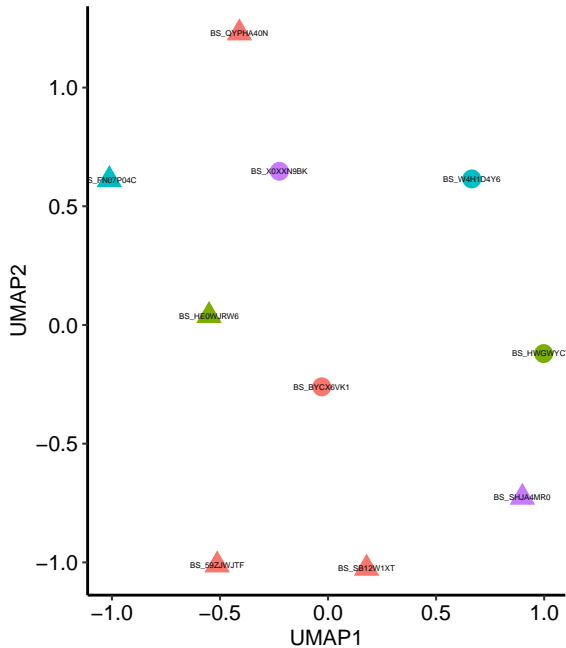
Brain Region	UMAP1 (approx.)	UMAP2 (approx.)	Cluster Color	Cluster Shape
BS_S612W1XT	0.2	1.1	Red	Triangle
BS_QYPIA40N	-1.0	-0.4	Red	Triangle
BS_56Z1WJTF	0.5	-1.0	Red	Triangle
BS_X0XXN9BK	-0.8	0.25	Purple	Circle
BS_HNGWYCY7	0.4	0.1	Purple	Circle
BS_HEOWJRV	0.9	0.5	Green	Triangle
BS_FN07P04C	-0.4	-0.2	Cyan	Triangle
BS_Y4H1D4Y6	-0.3	-0.9	Cyan	Circle
BS_SHU4MR0	0.8	-0.3	Purple	Triangle

stranded

PCA: RUVg output (k = 5)



UMAP: RUVg output (k = 5)



rna\_library ● poly-A ▲ stranded