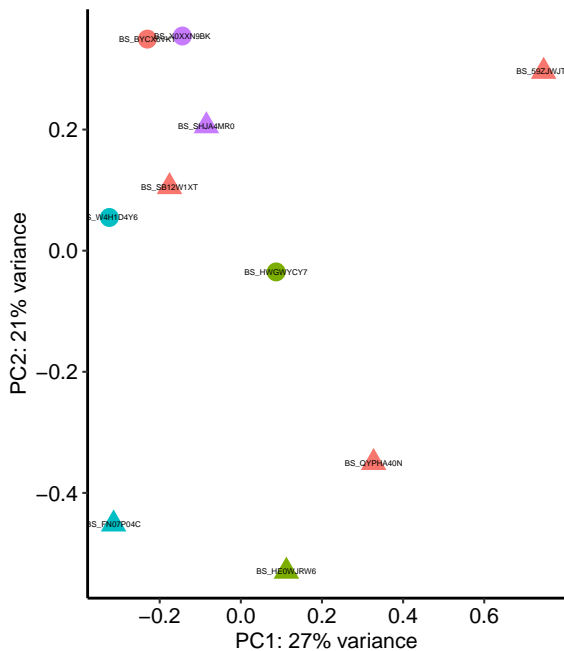
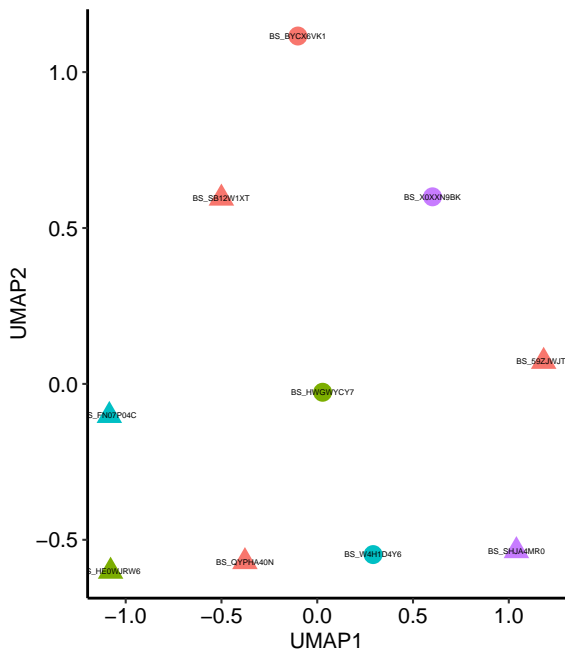


PCA: RUVg output (k = 1)

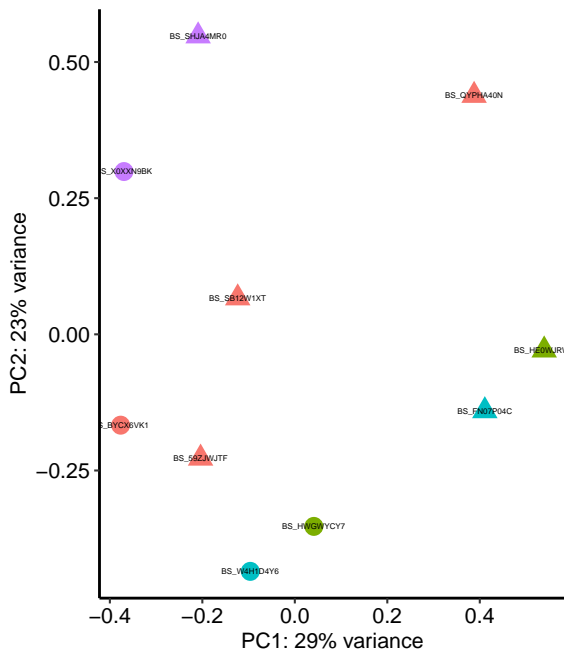


UMAP: RUVg output (k = 1)

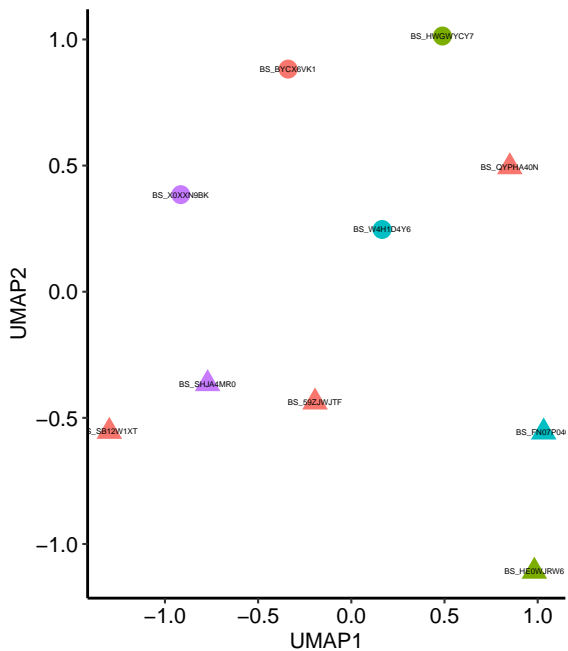


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PCA: RUVg output (k = 2)



UMAP: RUVg output (k = 2)



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PCA plot showing the first principal component (PC1) accounting for 33% of the variance. The plot displays 1000 random SNPs, colored by population group: red (European), green (African), purple (Asian), and cyan (Admixed American). The points are labeled with their respective SNP IDs.

SNP ID	Population Group	PC1 (approx.)	PC2 (approx.)
BS_W4H1D4Y6	Admixed American	-0.35	0.15
BS_54Z1WJTF	European	-0.25	0.35
BS_FN03P04C	Admixed American	0.10	0.45
BS_SHU4MF	Asian	0.45	0.30
BS_HE0WURW6	African	0.20	0.25
BS_X0X09BK	Asian	0.15	0.20
BS_H1G1YCY7	African	-0.30	0.05
BS_S612W1XT	European	0.00	0.05
BS_BYC6VK1	European	-0.35	-0.10
BS_QYPA40	European	0.45	-0.10

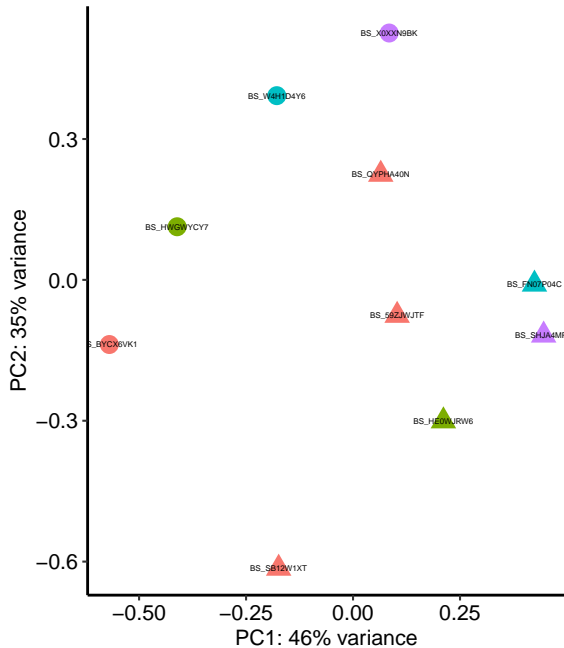
UMAP2

UMAP1

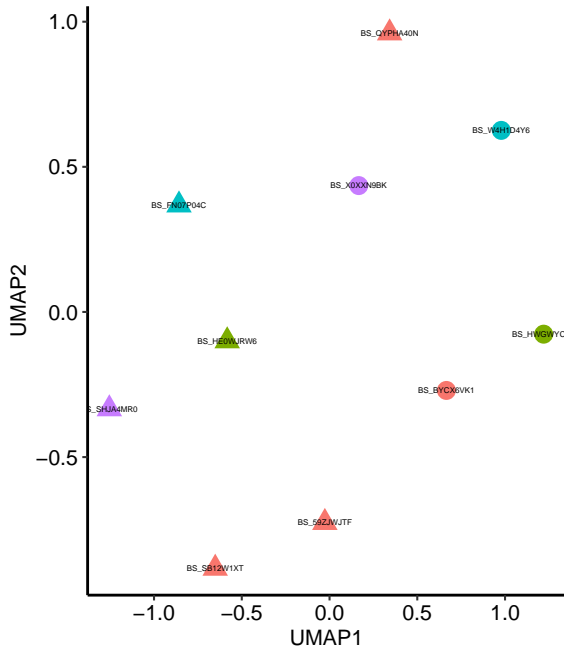
Sample ID	UMAP1	UMAP2	Group
BS_W4H1D4Y6	-1.0	0.6	Group 1 (Cyan Circle)
BS_BYC6VK1	-0.6	1.1	Group 2 (Red Circle)
BS_X0XXN9BK	0.0	1.3	Group 3 (Purple Circle)
BS_H1WCHYCY7	-0.4	0.4	Group 4 (Green Circle)
BS_QYPHA40N	0.5	0.8	Group 5 (Red Triangle)
BS_56ZMJTF	-0.4	-0.4	Group 5 (Red Triangle)
BS_SHUA4MR0	0.7	-0.5	Group 6 (Purple Triangle)
BS_SB12W1XT	-0.3	-1.0	Group 5 (Red Triangle)
BS_HE2VJRW6	0.3	-1.1	Group 7 (Green Triangle)
BS_FN07P04	1.0	-1.0	Group 8 (Cyan Triangle)

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PCA: RUVg output (k = 4)

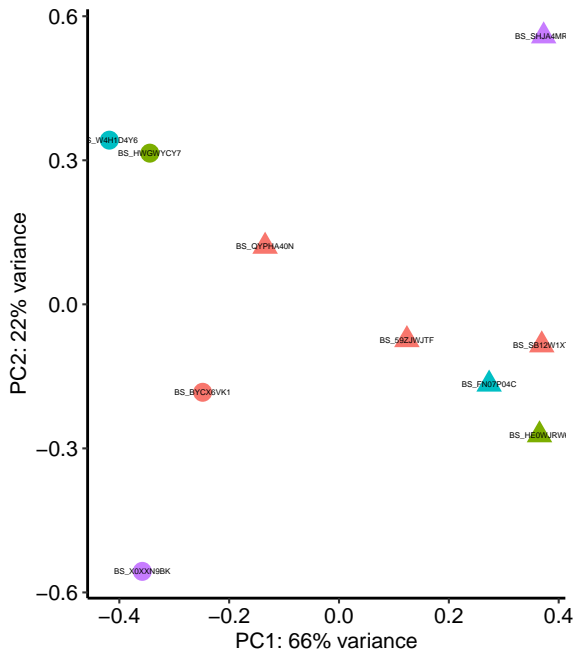


UMAP: RUVg output (k = 4)

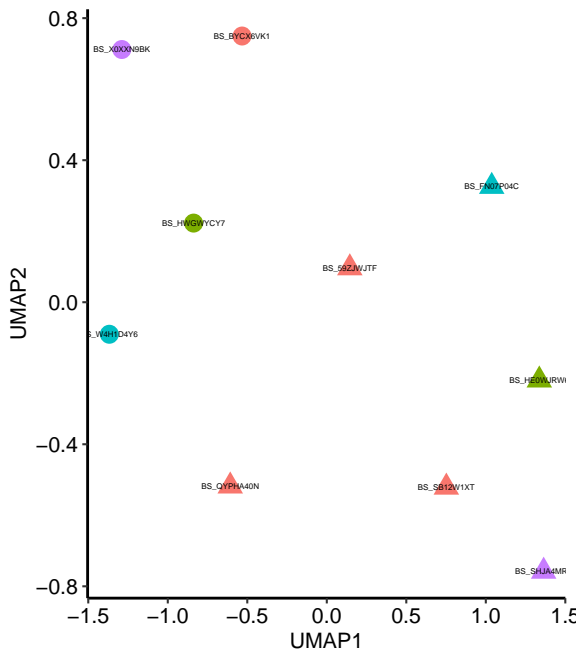


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PCA: RUVg output (k = 5)



UMAP: RUVg output (k = 5)



rna_library ● poly-A ▲ stranded