

Training data
#1317 features

Test data
1317 features

Filter and select important features			
Model	Control, pooled IR	Control, TBI, and Partial	Control, Brain, Gut, and Lung
Test (# features)	Student's T test (17)	Anova (22)	Anova + GBM (31)
Elastic net (10 iterations and selected by overlap)	(7)	(8)	(7)

LDA

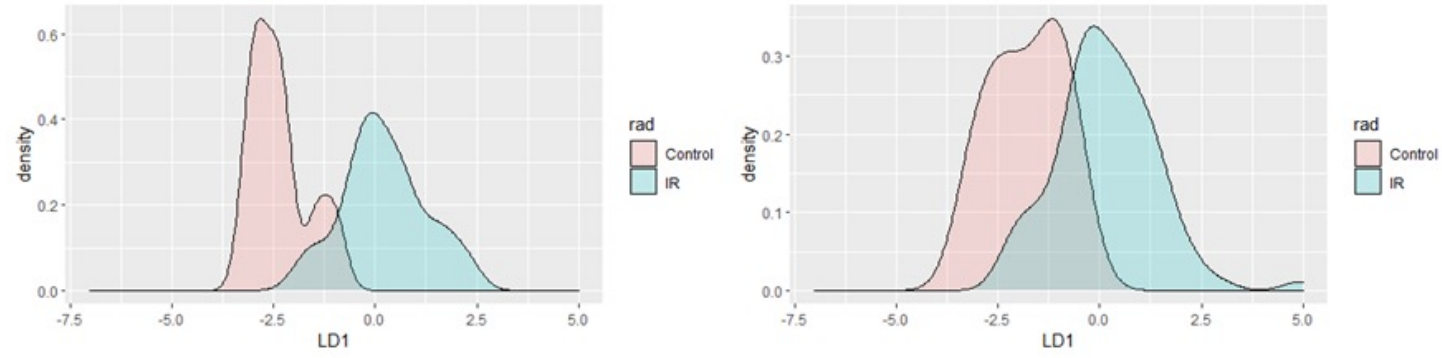
RPART

Predict validation

Predict validation



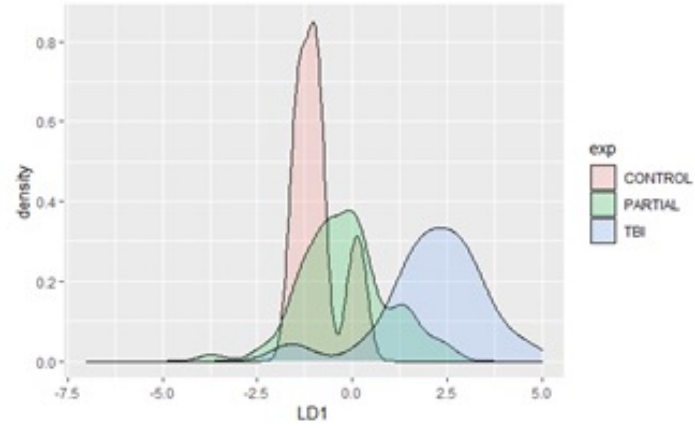
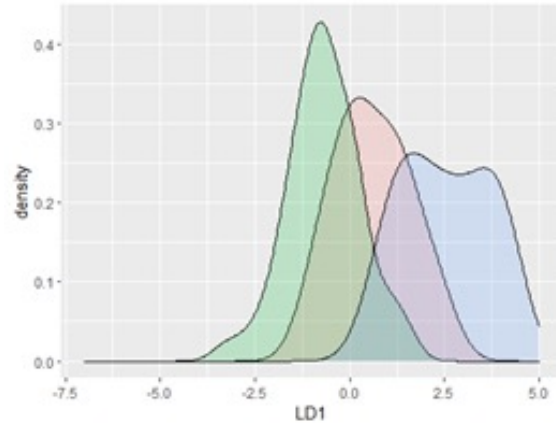
A)



B)

LDA Model 1 Prediction Matrix					
Training Data Set			Test Data Set		
	Control	IR		Control	IR
Control	7	0	Control	5	5
IR	2	94	IR	5	85
Accuracy	0.98		Accuracy	0.9	

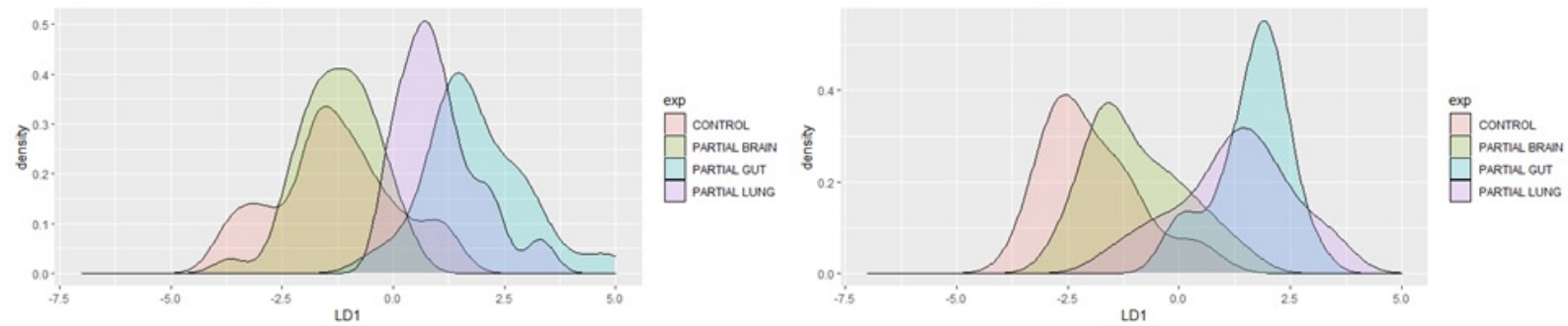
A)



B)

LDA Model 2 Prediction Matrix						
Training Data Set				Test Data Set		
	Control	Partial	TBI	Control	Partial	TBI
Control	4	0	1	0	4	0
Partial	5	75	5	10	63	3
TBI	0	1	12	0	5	15
Accuracy	0.88			Accuracy	0.78	

A)



B)

LDA Model 3 Prediction Matrix									
Training Data Set					Test Data Set				
	Control	Brain	Gut	Lung		Control	Brain	Gut	Lung
Control	6	1	0	0	Control	5	3	0	1
Brain	2	35	1	1	Brain	5	25	2	2
Gut	0	0	17	3	Gut	0	3	15	8
Lung	1	1	3	14	Lung	0	2	4	7
Accuracy	0.85				Accuracy	0.63			