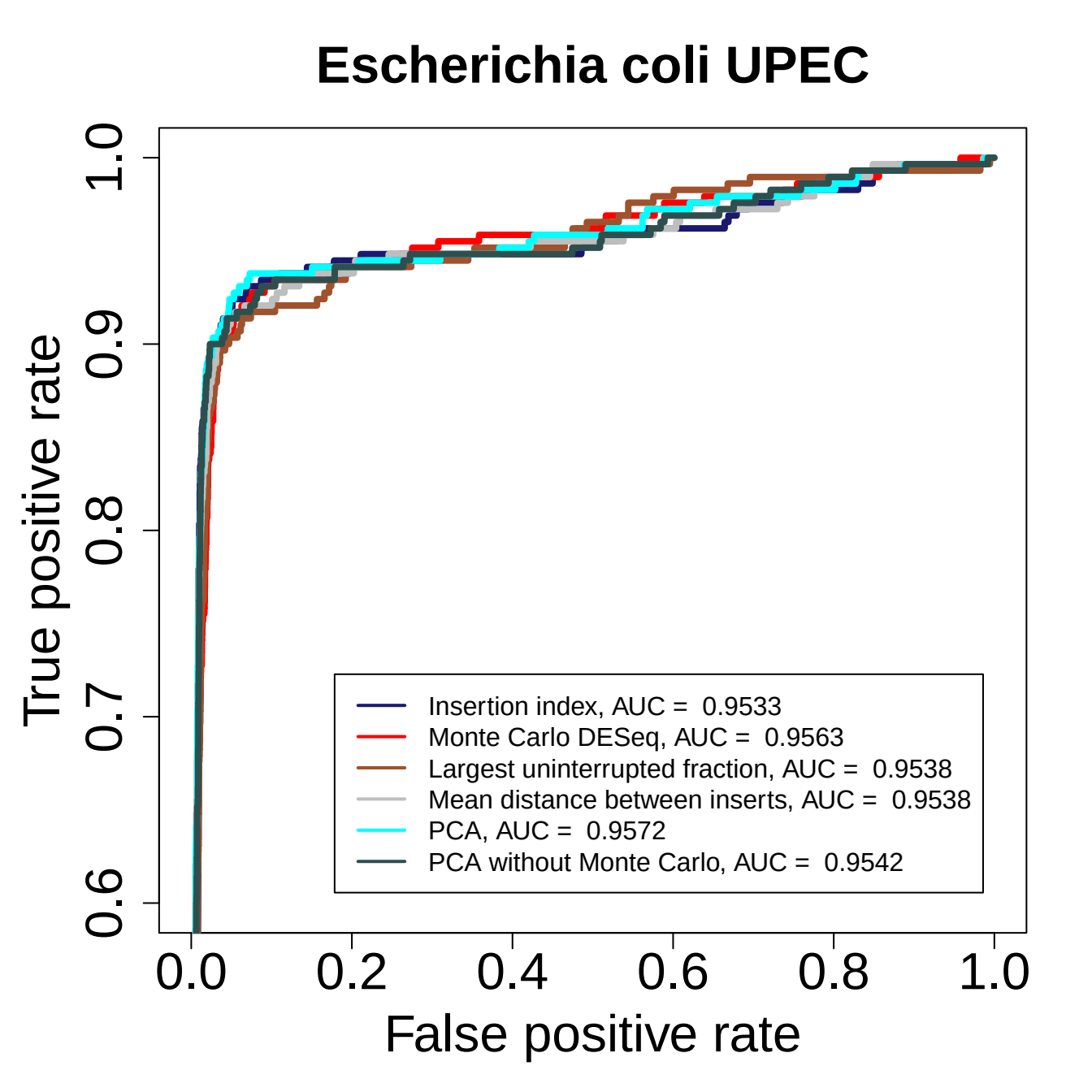
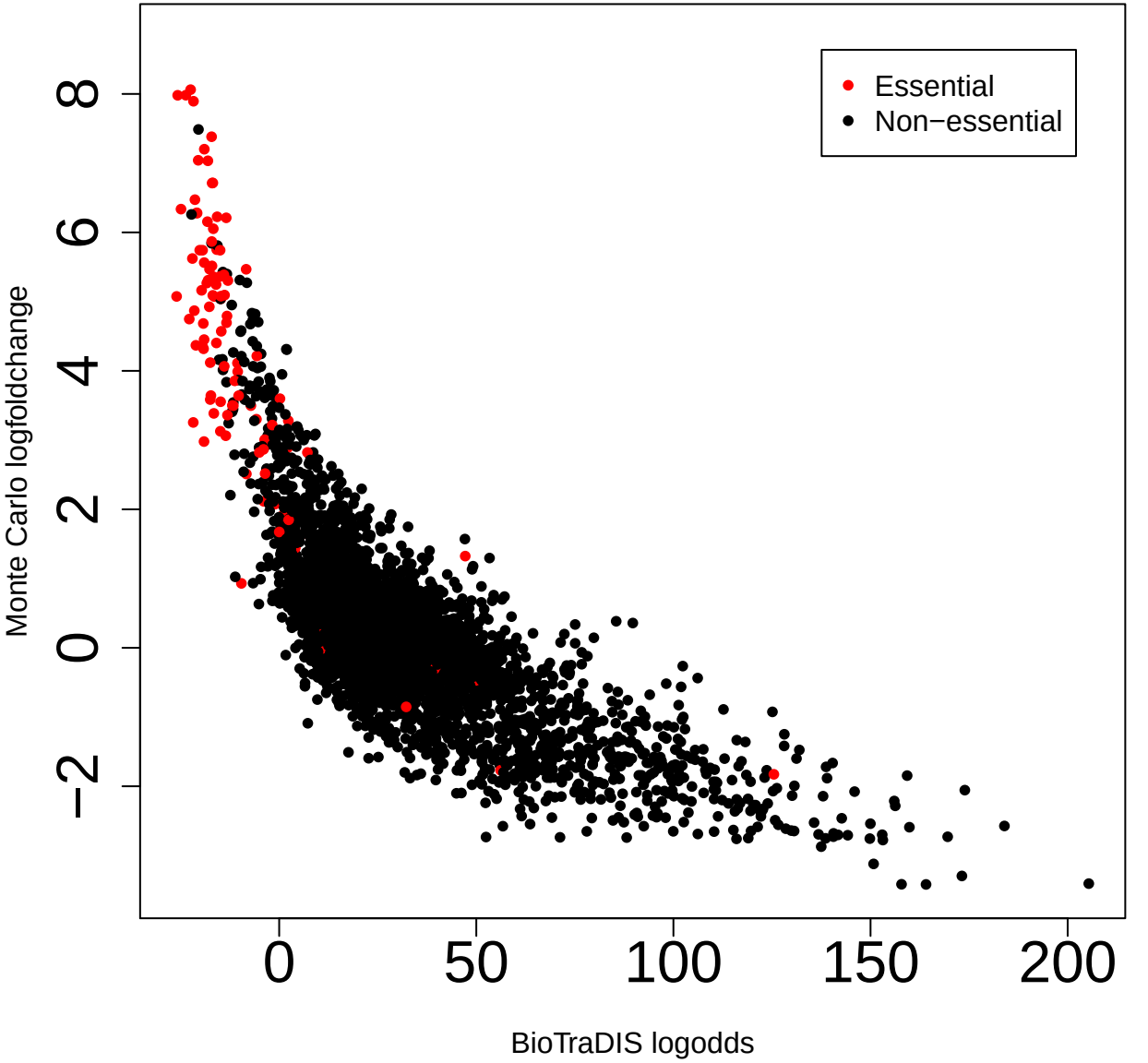
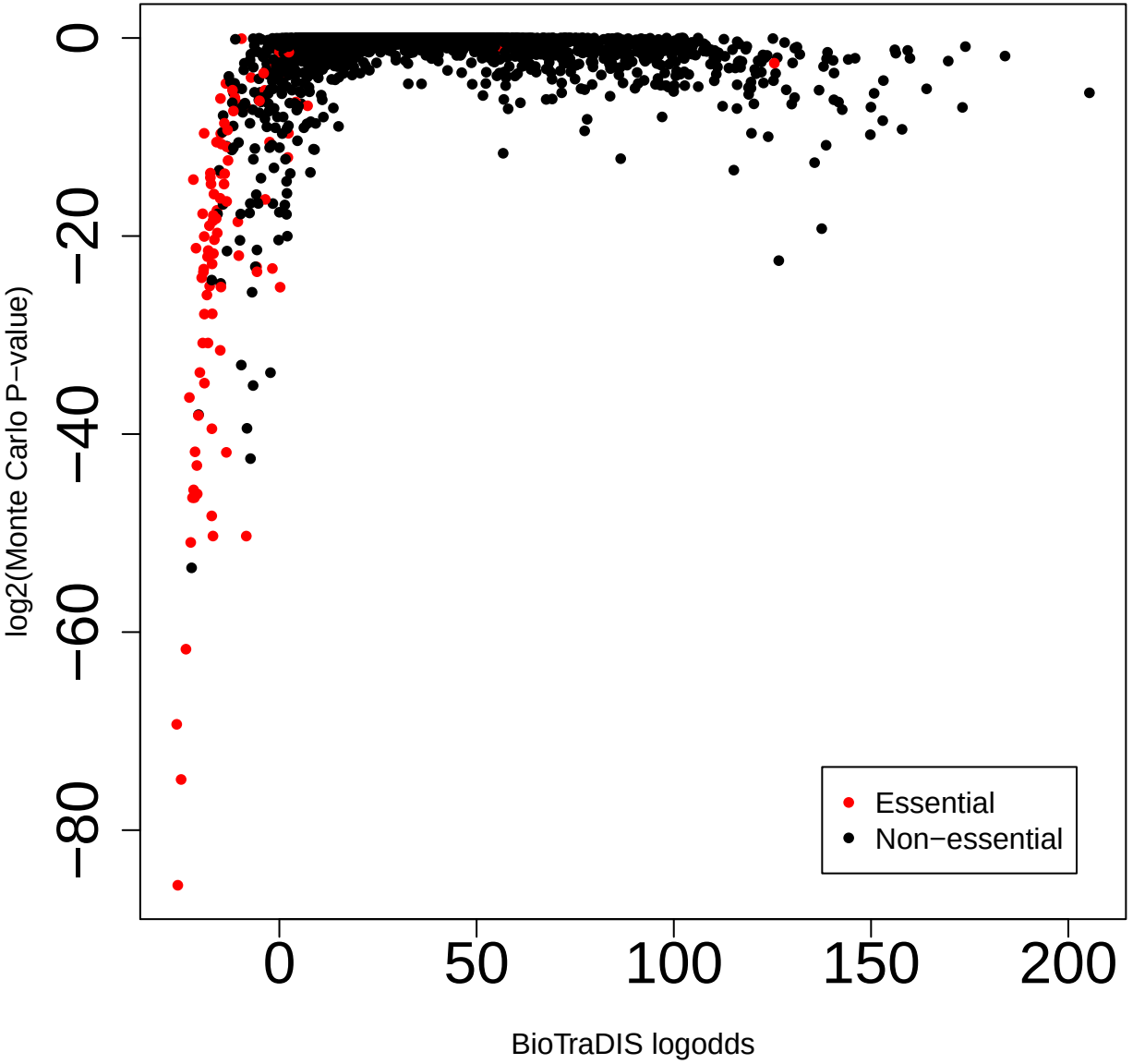
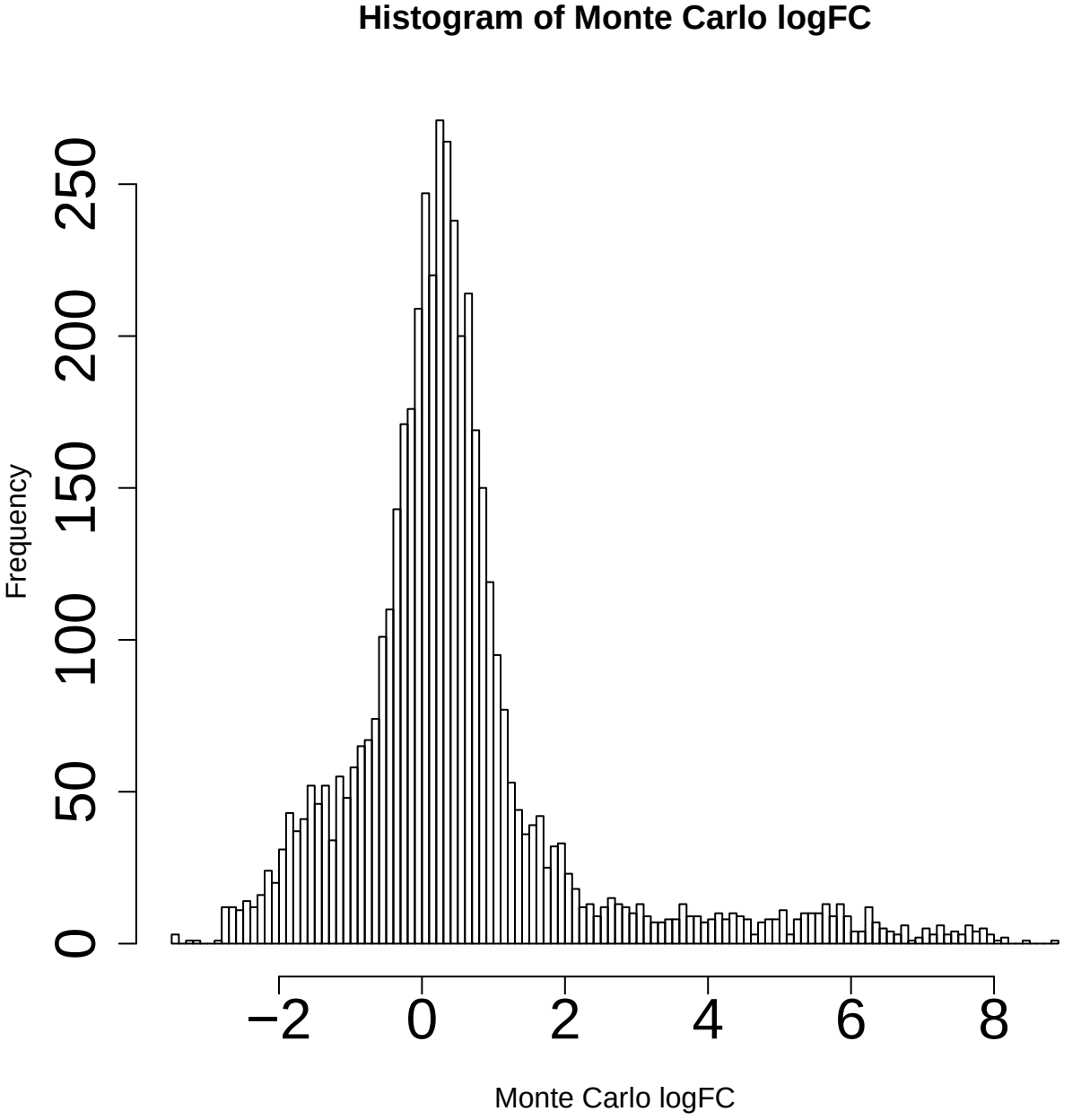
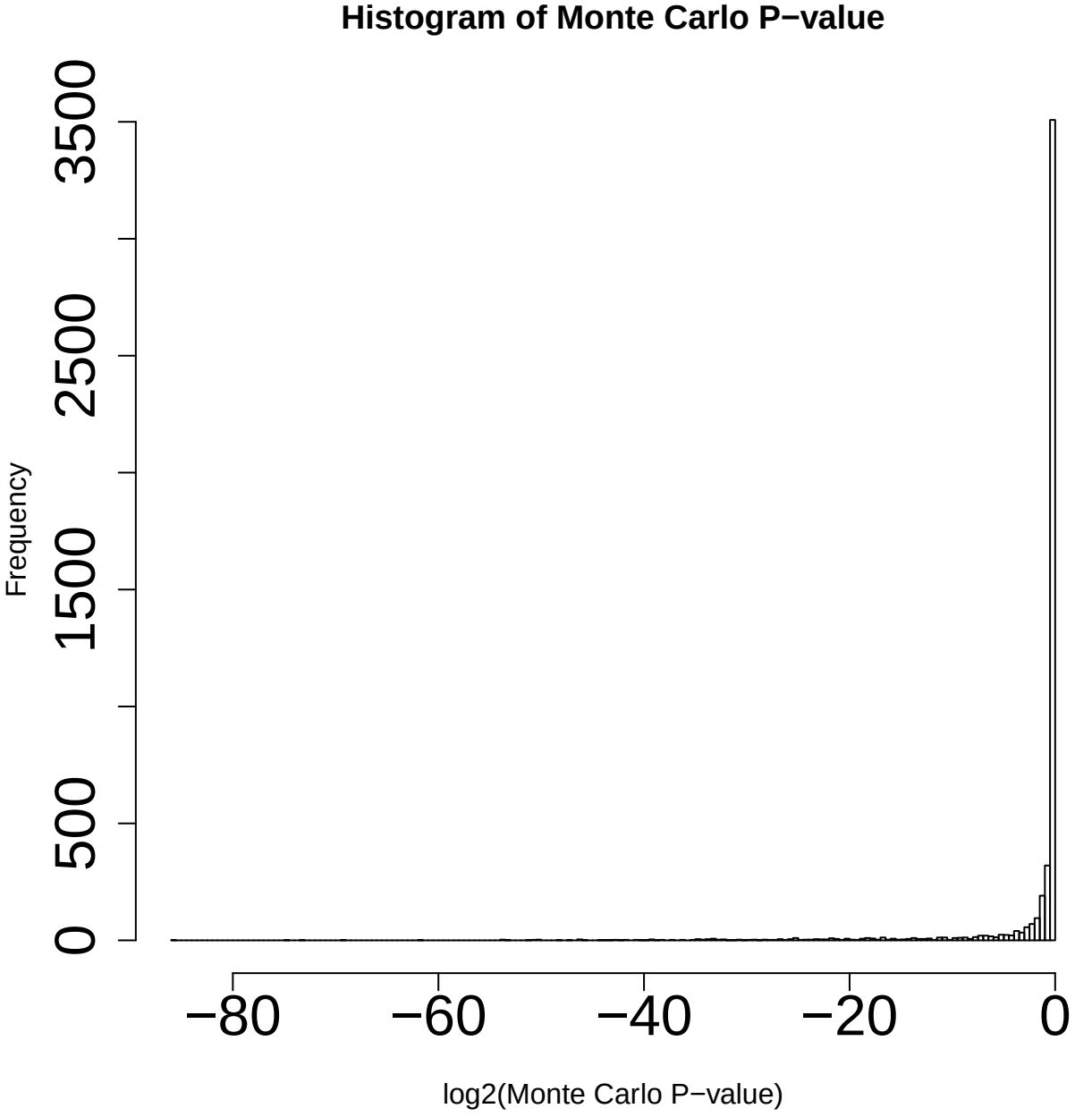
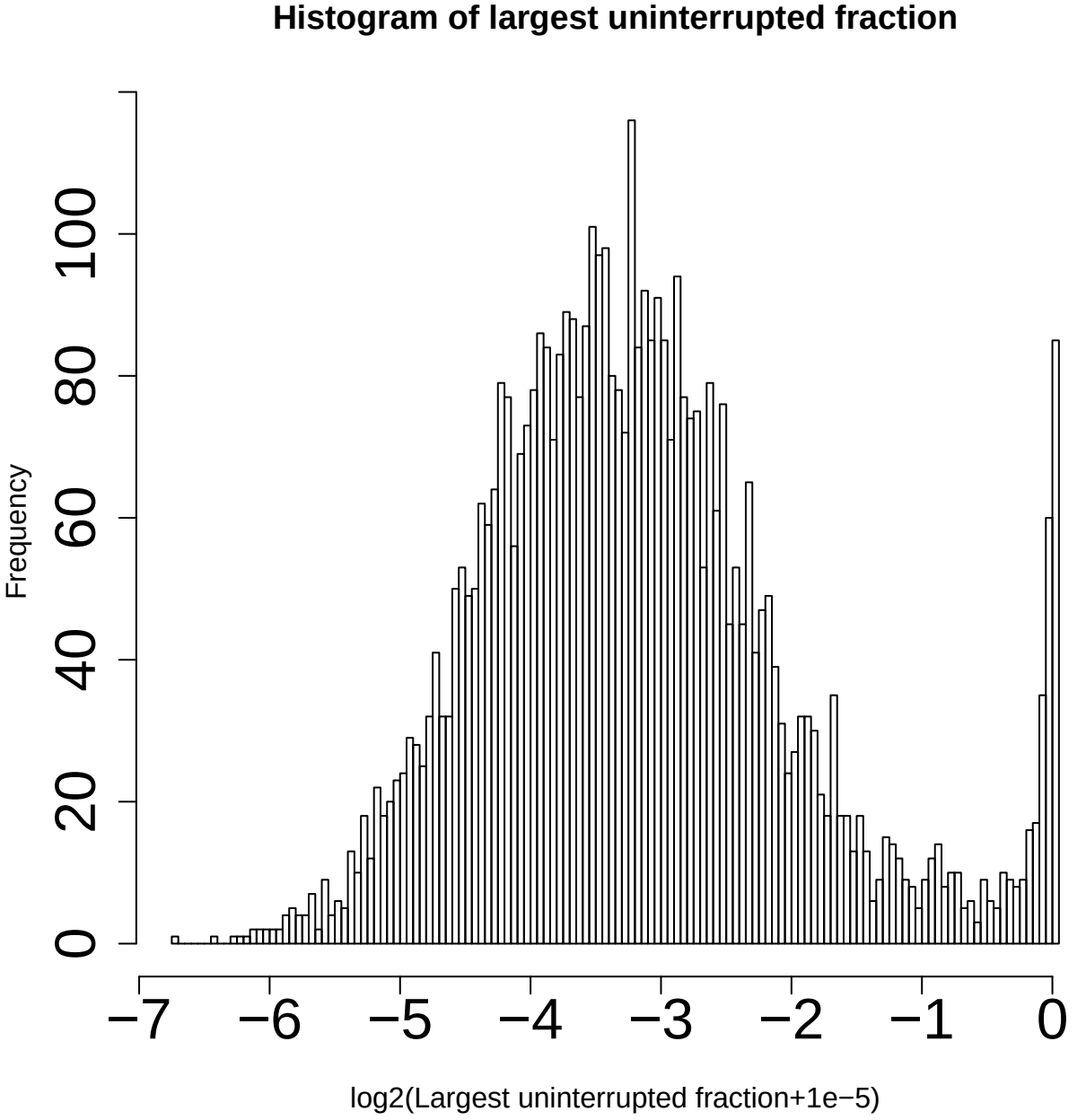

Escherichia coli UPEC
True positive rate
False positive rate
0.6
0.7
0.8
0.9
1.0
0.0
0.2
0.4
0.6
0.8
1.0
Insertion index, AUC = 0.9533
Monte Carlo DESeq, AUC = 0.9563
Largest uninterrupted fraction, AUC = 0.9538
Mean distance between inserts, AUC = 0.9538
PCA, AUC = 0.9572
PCA without Monte Carlo, AUC = 0.9542

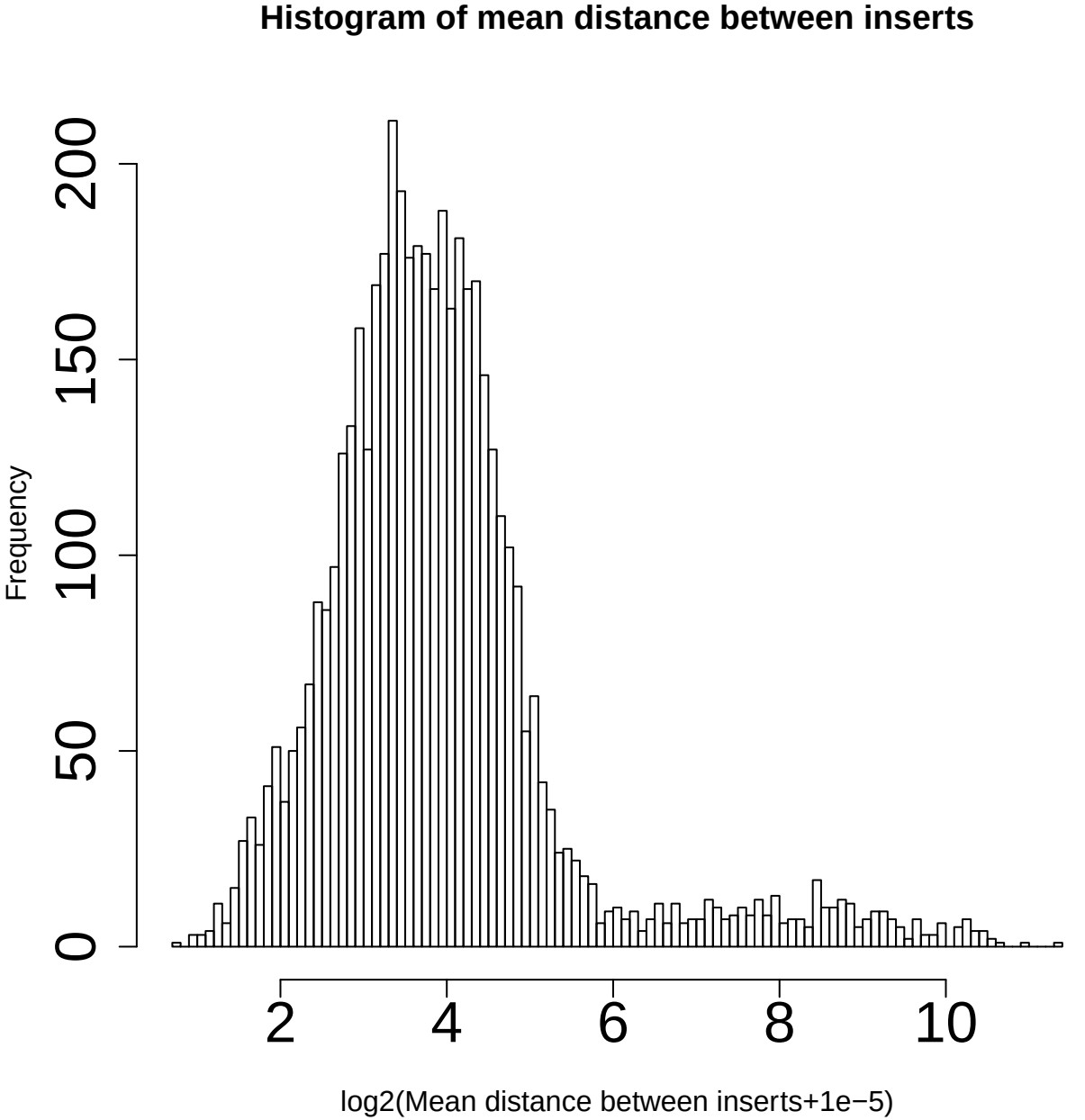

Essential
Non−essential
Monte Carlo logfoldchange
8
6
4
2
0
−2
0
50
100
150
200
BioTraDIS logodds

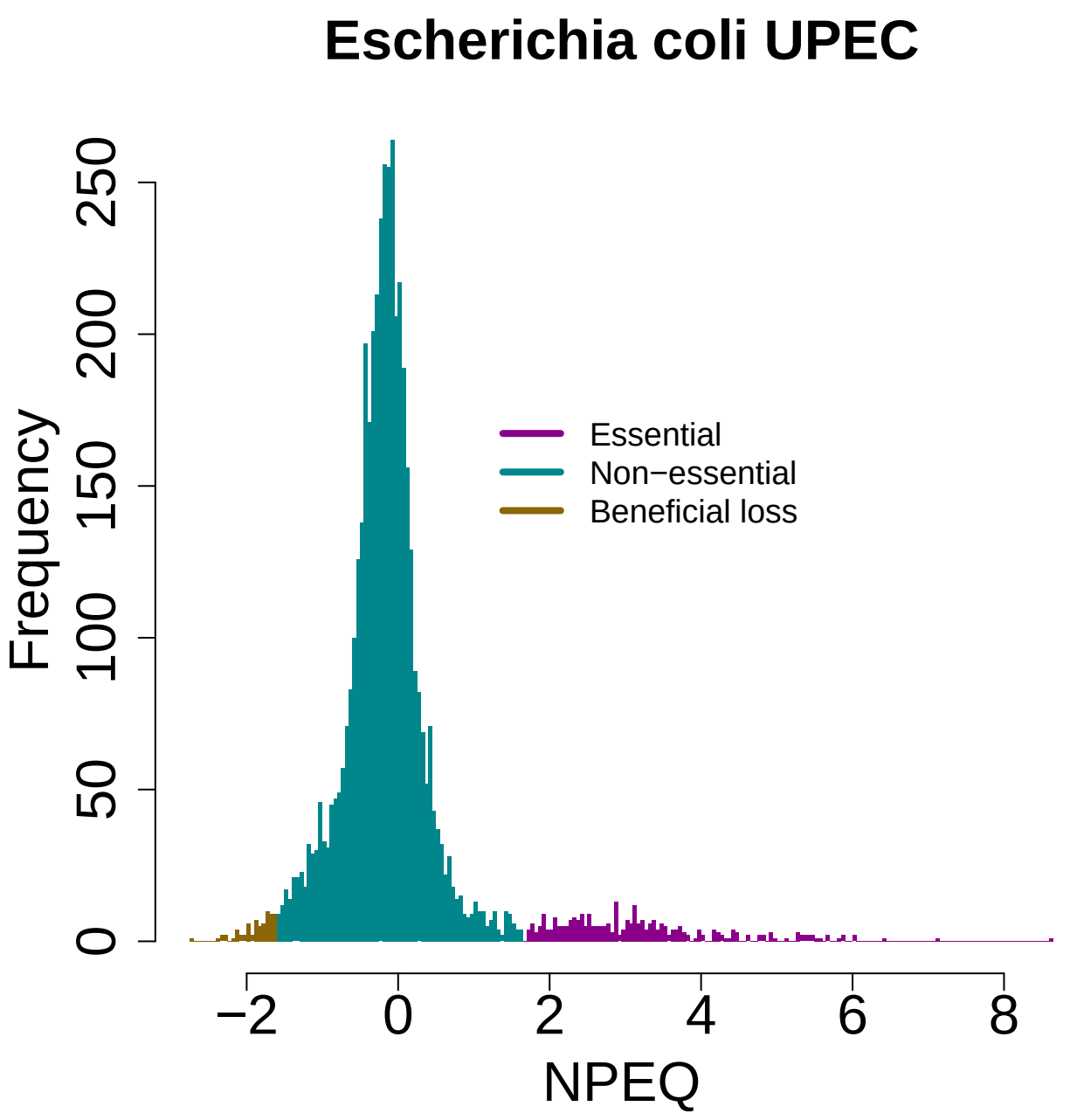

log2(Monte Carlo P−value)
0
−20
−40
−60
−80
0
50
100
150
200
BioTraDIS logodds
Essential
Non−essential


Histogram of Monte Carlo logFC
Frequency
0
50
100
150
200
250
−2
0
2
4
6
8
Monte Carlo logFC


Histogram of Monte Carlo P−value
Frequency
0
500
1500
2500
3500
−80
−60
−40
−20
0
log2(Monte Carlo P−value)


Histogram of largest uninterrupted fraction
Frequency
0
20
40
60
80
100
−7
−6
−5
−4
−3
−2
−1
0
log2(Largest uninterrupted fraction+1e−5)


Histogram of mean distance between inserts
Frequency
0
50
100
150
200
2
4
6
8
10
log2(Mean distance between inserts+1e−5)


Escherichia coli UPEC
Frequency
0
50
100
150
200
250
Essential
Non−essential
Beneficial loss
−2
0
2
4
6
8
NPEQ