Open the file Path548L Correlation Execise data file

You will see a file with 271 observations across 5 biomarkers which have been quantified with mRNA. Each observation represents a human tumour sample.

You want to investigate if the biomarkers are associated with each other and you will do this using correlations.

You will notice that there is raw data and log transformed data. For the first part of this exercise, use the raw data.

**Part 1**

• Plot the distributions of the five biomarkers and note what you observe about the shape of the distributions.

• Perform 2x2 parametric correlations for all the biomarkers – report Pearson’s **r**

• Repeat but now do non-parametric correlations and report Spearman’s 𝞺’

Observe the correlations between the two analyses and speculate as to why the analyses are different.

**Part 2**

Repeat steps 1 - 5 using the log transformed data.

In comparing the two analyses (raw and log transformed), what do you notice?