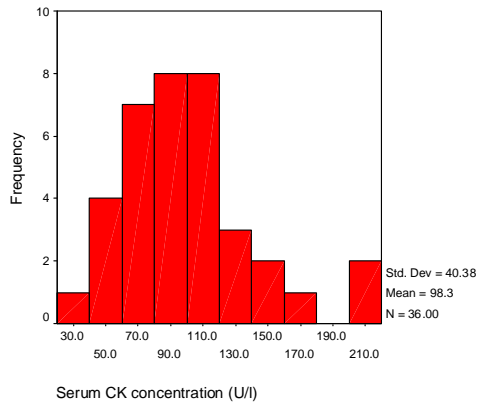


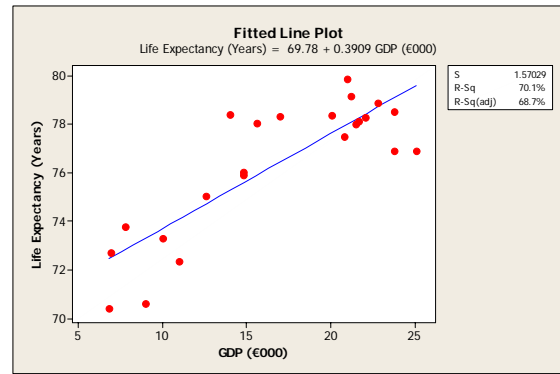
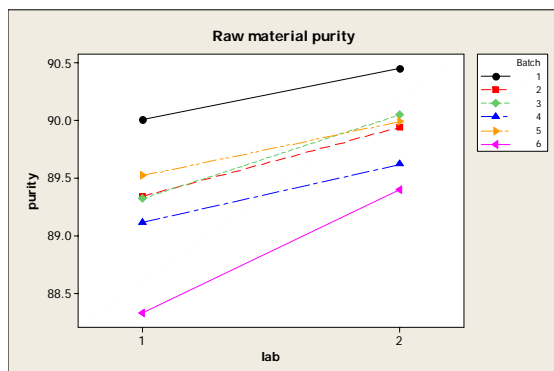
# Introduction to Statistics

This workshop gives a practical introduction to basic statistical concepts that will equip you with the skills to analyse your data and extract key information from it using your preferred statistical software package.



Topics covered in the workshop include

- Graphical and numerical summaries of data
- Detection of Outliers
- Confidence Intervals
- Hypothesis testing:
  - Two-sample and paired t-tests
  - Chi-square test
  - Analysis of Variance
- Investigating relationships in data and fitting equations to quantify such relationships,
- Sample size requirements
- How to take advantage of pairing or blocking of experimental units to increase power in your experiments.



This workshop is a mixture of presentations and hands-on computer sessions where participants can use their preferred statistical software package to analyse datasets. The content and duration can be tailored to suit your requirements. For example, the duration of a training course to include all of the topics described above is 1.5 days.

## Benefits to You

After attending this workshop you will be able to:

- explore your data and produce informative graphical and numerical summaries to extract the key information from your data
- select the appropriate statistical analysis to perform depending on the type of data you are dealing with, i.e. continuous or categorical
- investigate if there are relationships between variables in your dataset and fit equations to describe such relationships.
- understand how you can design your study to detect differences between two or more groups, etc.