



UNIVERSITY OF NAPLES FEDERICO II  
POLYTECHNIC AND SCIENCE SCHOOL  
Dept. of Chemical Sciences  
PhD School in Biotechnology  
Coordinatore Prof. Giovanni Sannia



# ***PhD course in Biotechnology***

## **Practical course in**

### **“Introduction to Data Analysis”**

#### Course content:

The course is meant for graduate students who are carrying out a PhD project in Biotechnology and aims at facilitating statistical analysis by Microsoft Excel. In particular, the course will describe how to use the Analysis ToolPack, statistical functions and how to perform basic statistical procedures.

#### **Aggregating Data in Excel**

Statistical Functions, Outlines, Subtotals, Pivot Tables

#### **Data Relation Analysis**

Normal Distribution, Descriptive Statistics, Linear Correlation, Regression Analysis, Covariance Extrapolation

#### **Comparing Populations**

Confidence Interval for the Mean, Test of Hypothesis Concerning the Population Mean, Difference Between Mean of Two Populations, ANOVA: Analysis of Variances, Goodness-of-Fit Test for Discrete Random Variables, Test of Independence: Contingency Tables

#### **Requirements**

Participants are expected to have the basics of Excel.

## **Held by Prof. Raffaele Velotta**

**Timetable: 25<sup>th</sup> to 28<sup>th</sup> September (four days), 2.00 pm - 5.00 pm**

**Room: computer room of the Department of Chemical Sciences**

**Enrollment is mandatory: send an e-mail to**  
**[rvelotta@unina.it](mailto:rvelotta@unina.it)**

**Number of available places: 20**