# **Chapter 4: Excel Instructions**

## Mean:

Type or import the data into Excel.

Click Data, Data Analysis, and Descriptive Statistics.

Specify the Input Range (ex: A1:A201) and click Summary Statistics.

PS: this command would give you multiple descriptive stats including mean, median, mode, range, variance, standard deviation, etc.

If we want to compute the mean and no other statistics, we can use the AVERAGE function.

Type or import the data into one or more columns. Type into any empty cell:

= AVERAGE([Input Range])

### Median:

If we want to compute the median and no other statistics, we can use the MEDIAN function.

Type or import the data into one or more columns. Type into any empty cell:

= **MEDIAN**([Input Range])

### Mode:

If we want to compute the mode and no other statistics, we can use the MODE.SNGL function.

Type or import the data into one or more columns. Type into any empty cell:

= MODE.SNGL([Input Range])

For multiple modes, use the Excel function MODE.MULT.

#### Variance:

Import the data into one column. Type into any empty cell:

= VAR.S([Input Range])

If you have data of a population, type the following formula instead:

= VAR.P([Input Range])

## **Standard Deviation:**

import the data into one column. Type into any empty cell:

= **STDEV.S** ([Input Range])

## **Percentiles:**

Type or import the data into one or more columns. Type into any empty cell:

= **PERCENTILE** ([Input Range], [P])

where P is the percentile, a value between 0 and 1 (for instance, for the 25<sup>th</sup> percentile, P=0.25)

# **Coefficient of Correlation:**

Type or import the data into two columns.

Type the following into any empty cell.

= **CORREL**([In put range of x variable], [Input range of y variable])

# **Scatter Trendline:**

- 1. Type or import the data into two columns where the first column stores the values of X and the second stores Y. Highlight the columns containing the variables. Follow the instructions to draw a scatter diagram.
- 2. Click the 1 sign, click **Trendline** and arrow. Click More Options and Display Equation on chart.