## Patrons

Rev. Dr. Francis P. Xavier, S.J.

Rector and Vice Chairman, Loyola College, Chennai.

Rev. Dr. B. Jeyaraj, S.J.

Secretary and Correspondent, Loyola College, Chennai.

Rev. Dr. A. Thomas, S.J.

Principal, Loyola College, Chennai.

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Dr. S. John Mary

Dr. V. Pushpa Rani Dr. M. Jaccob

**Organizing Members** 

Dr. M. Victor Antony Raj

Ms. Lishanthi Ravi Ms. Lorraine Rocha

Registration Link:

https://forms.gle/zicCEdbqp1LrTX5T9

## Payment Details:

Indian Overseas Bank M/S DIRECTOR LIFE

Account No : 171201000009998 IFSC : IOBA0001712

Branch : Loyola College Campus

## Registration Fee Per Candidate: Rs. 800 /-

## Participants:

PG Students/Research Scholars/Faculties of Life Sciences Number of Participants: 30

# Background

## About Loyola College

Loyola College, a Catholic Minority Institution, was founded by the Society of Jesus (Jesuits) in 1925, with the primary objective of providing University Education in a Christian atmosphere for deserving students irrespective of caste and creed. UGC conferred the status of "College with potential for Excellence" on Loyola College in 2004 and confirmed the same in 2010. The aim of the college is to educate young men and women to serve their fellow men and women in justice, truth and love. It fosters an atmosphere of intellectual vigor and moral rectitude in which the youth of our country may find their fulfilment and achieve greatness as eminent men and women of service.

## Loyola Institute of Frontier Energy (LIFE)

LIFE is an interdisciplinary and collaborative research institute in Loyola College involved in collaborative, and interdisciplinary research in science with a balance between pure and applied sciences with the ultimate view of translating the fruits of research for improving the quality of life of the society. The thrust areas are: Energy, Environment, Material Science, Bioethics, Awareness Education to Students and the Masses.



## About the Workshop (BST2022)

Biostatistics is basically the development and application of statistical methods to a wide range of topics in biology. It is an essential component of any research work from the design of biological experiments, collection and the analysis of data from those experiments and the interpretation of the results. With this in mind, this workshop is aimed to help the students to manoeuvre through the different biostatistical tools by using Microsoft EXCEL to validate their research work.

# Objectives of Workshop

- Introduction to Statistical Analysis
- Application of statistics in Research
- Basic Excel Functions, Formula
- Overview and techniques for Descriptive Statistics
- Mean, Median, Mode
- Standard Error, Standard Deviation
- Sample variance
- Skewness and Kurtosis
- Overview and techniques for Testing of Hypothesis using Inferential Statistics
- · Simple and multiple Linear Regression
- Data visualisation methods
- Intra- and Inter correlation
- McNemar test
- · Kappa test
- Logistic analytical model
- Chi-square tests
- t-Tests (Independent t-test and Paired t-test)
- ANOVA one Factor and 2 Factor ANOVA