

# 50<sup>th</sup> ACBICON 2024

## Golden Jubilee Conference of Association of Clinical Biochemists of India

4<sup>th</sup> - 7<sup>th</sup> December, 2024 | Hotel Mount View, Chandigarh

Organized by: Department of Biochemistry, PGIMER Chandigarh.

Theme: From Laboratory to Life: Recent Advances in Basic and Medical Research for Global Healthcare



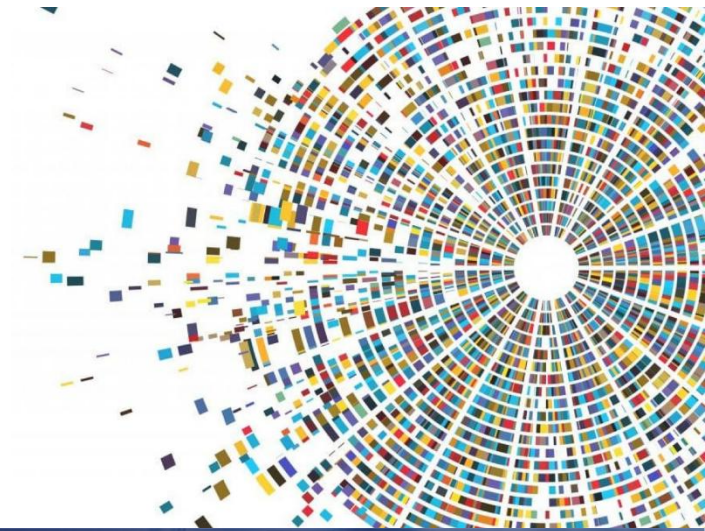
WORKSHOP

## Bioinformatics approaches for Transcriptome Data Analysis

**Target audience:** Masters' students in life sciences, Research scholars, Ph.D. students in Life sciences, Residents, Faculty.

### Highlights:

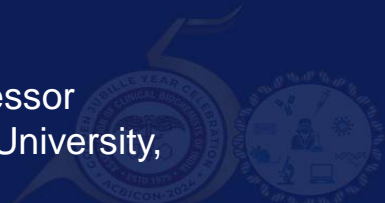
- Screening datasets- Sources NCBI GEO/TCGA/Array Express
- Introduction to coding /noncoding RNA Databases
- R based / GUI based analysis
- DEGs evaluation, Transcript profiling
- Tools for Enrichment
- Pathway/Gene ontologies/Function enrichment/Pathway enrichment
- Survival Analysis



### Faculty/ Convenor



**Dr. Veena Puri**  
Associate Professor  
CSBB, Panjab University,  
Chandigarh.



# Getting Started with R Studio: From Download to Data Analysis



# System Requirements

- All trainees must bring their laptops.
- All must download R Studio after downloading R Gui.
- Links are provided hereby:
- R studio download - <https://posit.co/download/rstudio-desktop/>
- R Gui- <https://cran.rstudio.com/>



# RGUI (R Graphical User Interface)

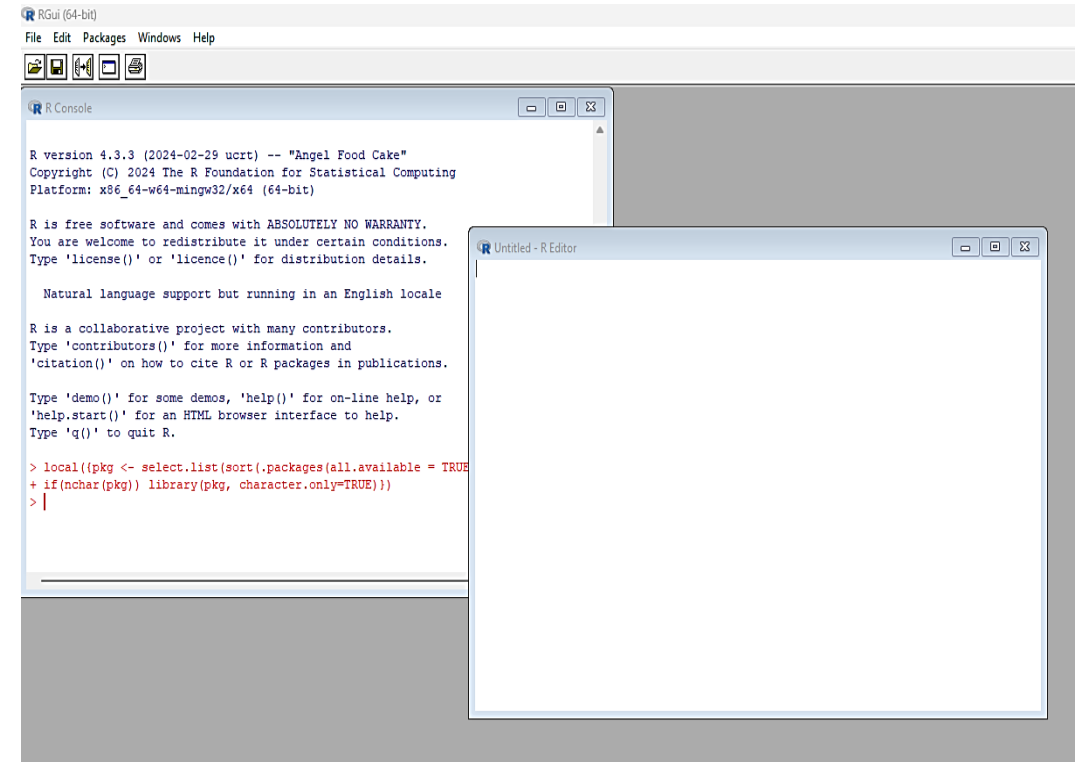
## Downloading R

Download the latest version from the  
Comprehensive R Archive Network (CRAN) at  
<https://cran.r-project.org/>

Choose your operating system (Windows, Mac, or Linux) and  
follow the installation instructions.

## Installing R

Choose the installation directory and  
desired components.





# R Studio

Download the free R Studio Desktop version from

<https://www.rstudio.com/products/rstudio/download/>

Select the installer for your operating system.

Installing R Studio

Double-click the downloaded installer file.

Launching R Studio

open R Studio

R Studio Layout

- Source editor
- Console
- Environment/History
- Files/Plots/Packages/Help

Basic R Studio Workflow

Create or open a script

Execute/Run code

View results

Manage your environment

