



“Biostatistics Essentials”

A Six-Day Online Workshop for Clinicians
27th January – 1st February, 2026

Organised By

Sikkim Manipal College of Physiotherapy

Resource Person

Dr. Amit Kumar
Associate Professor & Head
Department of Laboratory Medicine
Rajendra Institute of Medical Sciences, Ranchi





SIKKIM MANIPAL COLLEGE OF PHYSIOTHERAPY

Established in the year 2001, Sikkim Manipal College of Physiotherapy(SMCPT) has been standing strong on the foundation and leadership of Sikkim Manipal University as its constituent unit.

Ranked 4th among the top 20 physiotherapy colleges, SMCPT is distinguished by its pursuit of academic excellence and unwavering dedication to research.

Sikkim Manipal College of Physiotherapy also serves as a clinical department as Department of Physiotherapy, in a 500-bedded Super-specialty Central Referral Hospital, 5th Mile, Tadong, Gangtok.

About the Workshop



A 6 day online workshop aims to cover essential topics in clinical research such as statistical analysis, data interpretation, hypothesis testing and hands-on training in software tools for biostatistical computations.

Eligibility

Faculties, Phd scholars, Research scholars , Interns, Graduate and Post -graduate students of all background

Registration Link & QR Code:

<https://forms.gle/f9XJjYCQxCd6dVwT6>



About the Resource Person



**Associate Professor & Head, Department of Laboratory Medicine
Rajendra Institute of Medical Sciences (RIMS), Ranchi, India**

- Ph.D. (AIIMS, New Delhi); PG Diploma in Applied Statistics (IGNOU)
- Gold Medalist, ICMR Fundamental Health Research Course
- Domain Expertise: Laboratory Medicine, Biostatistics, Meta-analysis, Biochemistry, Neuro-Biochemistry, Molecular Biology, Genetics, Epidemiology, Research Methodology
- Research Impact: 100+ PubMed-indexed articles in the last decade; H-index 30, i10-index 83
- Leadership Roles: Principal Investigator, DHR-ICMR Technical Resource Centre for Evidence-Based Guidelines Development
- Memberships: Association of Clinical Biochemists, Evidence-Based Healthcare Society India, Indian Stroke Society
- Reviewer: 20+ international and national journals
- Awards: 5 International Travel Grants, Best Poster (Indian Stroke Association, 2012), Young Investigator Award (World Stroke Organization, 2014)
- Major Projects: Evidence-based guidelines, stem cell therapy in multiple sclerosis, haemoglobinopathies in tribal women, cerebral small vessel disease imaging, and stroke care quality improvement

Workshop Schedule

Mode : Online

Time : 6:30pm - 8:30 pm

Day 1 (27 January 2026)	<p>Basics of Biostatistics, Data types and Study Design</p> <ul style="list-style-type: none">• Types of Data (Quantitative & Qualitative)• Descriptive Statistics: Mean, Median, Mode, SD, IQR• Rates and Proportions• Study Designs: Cohort, Case Control, RCT, Cross-sectional• Bias & Confounding
Day 2 (28 January 2026)	<p>Parametric Statistical Tests</p> <ul style="list-style-type: none">• Assumption of parametric tests• Normality Testing (Shapiro-Wilk, KS test)• Independent Test• Paired t-Test• One-Way ANOVA• Post-hoc tests (Tukey, Bonferroni)• JAMOVI hands-on: Data entry, Descriptive statistics and plot
Day 3 (29 January 2026)	<p>Non-Parametric Statistical Tests</p> <ul style="list-style-type: none">• Mann-Whitney U test• Wilcoxon signed Rank Test• Kruskal – Wallis Test• Friedman Test• Clinical examples for skewed data• JAMOVI Hands-on: All non-parametric tests
Day 4 (30 January 2026)	<p>Qualitative Data Analysis and Hypothesis Testing</p> <ul style="list-style-type: none">• Hypothesis, p- value, confidence interval• Chi-square test• Fisher's exact test• McNemar test• Effect measures for categorical data• JAMOVI Hands-on: Contingency tables and tests

Workshop Schedule

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Time : 6:30pm - 8:30 pm

Day 5 (31 January 2026)	<p>Correlation, Simple Regression and Risk Measures</p> <ul style="list-style-type: none">• Pearson & Spearman correlation• Simple Linear Regression• Introduction to Logistic Regression• Odds Ratio (OR), Risk Ratio (RR)• JAMOVI Hands-on: Correlation, Regression models
Day 6 (1 February 2026)	<ul style="list-style-type: none">• Multiple Linear Regression• Multivariable Logistic Regression• Adjusted Odds Ratio• Confounding & effect Modification• Model diagnostic• JAMOVI Hands-on: Multivariate models

After successful registration, the participants will receive a confirmation via email. Please keep checking the spam folder of the email as the bulk email sent may end up in the spam folder.

An official group has been made for communication with the participants on “Whats App.”

The link to join the official group will be provided in the confirmation mail.

Workshop Coordinator : Dr. Rahul Kumar Thakur

For queries, mail us at: rahulkumar.t@smims.smu.edu.in



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