# Ramanujan College

## FACULTY PROFILE

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| **FIRST NAME** | **Dr. ABHISHEK** | **MIDDLE NAME (if any)** | | **PHOTOGRAPH (ATTACH BELOW)** |
| **LAST NAME** | | | |  |
| **DEPARTMENT** | STATISTICS | | | |
| **DESIGNATION** | Assistant Professor | | | |
| **GENDER** | Male | | | |
| **DATE OF BIRTH DD/MM/YYYY (optional)** | 15/11/987 | | | |
| **LANGUAGE PROFICIENCY** | English, Hindi | | | |
| **ADDRESS** | Department of Statistics, Ramanujan College, University of Delhi, Kalka Ji, New Delhi, India, 110019 | | | |
| **MOBILE (optional)** | | | | |
| **EMAIL** | abhishek@ramanujan.du.ac.in | | | |

**EDUCATIONAL QUALIFICATIONS:**

| DEGREE | INSTITUTION | YEAR |
|---|---|---|
| B.Sc. | M.D. University, Rohtak | 2009 |
| M.Sc. | M.D. University, Rohtak | 2011 |
| Pre Ph. D. | M.D. University, Rohtak | 2012 |
| Ph. D. | M.D. University, Rohtak | 2016 |

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**CAREER PROFILE: TEACHING EXPERIENCE**

**I began my career as an Assistant Professor of Statistics at the Amity Institute of Applied Sciences, Amity University Noida, on November 1, 2016. Over the course of my tenure, which lasted until July 23, 2018, I accumulated invaluable experience and developed my teaching and research skills in a dynamic academic setting.**

**On July 24, 2018, I transitioned to Ramanujan College, where I took on the role of Assistant Professor of Statistics. I am currently employed in this position and continue to contribute to the college's academic community. My time at Ramanujan College has been marked by ongoing professional growth and involvement in various significant projects, enhancing my expertise and supporting the institution's mission.**

**CAREER PROFILE: INDUSTRY EXPERIENCE**

**NA**

**ADMINISTRATIVE ASSIGNMENTS: (List any administrative roles or responsibilities you have held)**

- **Convenor, Feedback Committee**
- **Member, Proctorial Committee**
- **Member, Canteen Committee**

**AREAS OF INTEREST / SPECIALIZATION: (Highlight your specific areas of interest or fields of specialization within your subject area)**

- **Information Theory and Fuzzy Sets**
- **Biostatistics**
- **Reliablity Modelling**

**SUBJECTS TAUGHT: (List all the subjects you have taught)**

- **Introduction to Probability**
- **Stochastic Processes**
- **Multivariate Analysis**
- **Time Series Analysis**

**COURSE DEVELOPMENT: (Mention any courses you have developed or contributed to designing)**

**RESEARCH GUIDANCE: (Provide details on research supervision, indicating the number of doctoral and postgraduate students guided)**

**PUBLICATIONS PROFILE: RESEARCH PAPERS (List your published research papers, including the title, journal, and year)**

1. Diagnosis of abdominal tuberculosis: Detection of mycobacterial CFP-10 and HspX proteins by gold nanoparticle-PCR amplified immunoassay, **Journal of Microbiological Methods**, 2024, 220, 106925.
2. Diagnosis of pleural tuberculosis by multi-targeted loop-mediated isothermal amplification assay based on SYBR Green I reaction: comparison with GeneXpert® MTB/RIF assay, **Expert Review of Respiratory Medicine**, 2023, 17(11), 1079-1089.
3. Quantification of mycobacterial proteins in extrapulmonary tuberculosis cases by nano-based real-time immuno-PCR, **Future Microbiology**, 2023, 18(12), 771-783.
4. Diagnosis of genitourinary tuberculosis: detection of mycobacterial lipoarabinomannan and MPT-64 biomarkers within urine extracellular vesicles by nano-based immuno-PCR assay, **Scientific Reports**, 2023, 13(1), 11560.
5. Reliability Analysis of Parallel System Using Priority to PM Over Inspection, **Reliability: Theory & Applications**, 2023, 18(1), 329-339.
6. Diagnosis of abdominal tuberculosis by multi-targeted (*mpt64* and IS*6110*) loop-mediated isothermal amplification assay, **Journal of Gastroenterology and Hepatology**, 2022, 37(12), 2264-2271.
7. Quantitative detection of mycobacterial mannophosphoinositides in tuberculosis patients by real-time immuno-PCR assay, **Journal of Microbiological Methods**, 2022, 201, 106563.
8. Identification of mycobacterial MPT-64 and ESAT-6 proteins in urogenital tuberculosis patients by real-time immuno-PCR, **Future Microbiology**, 2022, 17(11), 829-842.
9. Diagnosis of peritoneal tuberculosis by real-time immuno-PCR assay based on detection of a cocktail of *Mycobacterium tuberculosis* CFP-10 and HspX proteins, **Expert Review of Gastroenterology & Hepatology**, 2022, 16(6), 577-586.
10. Diagnosis of osteoarticular tuberculosis by immuno-PCR assay based on mycobacterial antigen 85 complex detection, **Letters in Applied Microbiology**, 2022, 74(1), 17-26.
11. Detection of mycobacterial CFP-10 (Rv3874) protein in tuberculosis patients by gold nanoparticle-based real-time immuno-PCR, **Future Microbiology**, 2020, 15(8), 601-612.
12. Detection of *Mycobacterium tuberculosis* lipoarabinomannan and CFP-10 (Rv3874) from urinary extracellular vesicles of tuberculosis patients by immuno-PCR, **Pathogens and Disease**, 2019, 77(5), ftz049.
13. Evaluation of *in silico* designed inhibitors targeting MelF (Rv1936) against *Mycobacterium marinum* within macrophages, **Scientific Reports**, 2019, 9(1), 10084.
14. Quantitative detection of a cocktail of mycobacterial MPT64 and PstS1 in tuberculosis patients by real-time immuno-PCR, **Future Microbiology**, 2019, 14(3), 223-233.
15. Comparative evaluation of GeneXpert MTB/RIF and multiplex PCR targeting *mpb64* and *IS6110* for the diagnosis of pleural TB, **Future Microbiology**, 2018, 13(4), 407-413.
16. Dimensionality reduction using fuzzy soft set theory, **International Journal of Statistics and Reliability Engineering**, 2017, 4(2), 154-158.
17. Development of real-time immuno-PCR for the quantitative detection of mycobacterial PstS1 in tuberculosis patients, **Journal of Microbiological Methods**, 2017, 132, 134-138.

**18.** Diagnosis of tuberculosis based on the detection of a cocktail of mycobacterial antigen 85B, ESAT-6 and cord factor by immuno-PCR, **Journal of Microbiological Methods**, 2016, 127, 24-27.

**19.** Serodiagnostic potential of immuno-PCR using a cocktail of mycobacterial antigen 85B, ESAT-6 and cord factor in tuberculosis patients, **Journal of Microbiological Methods**, 2016, 120, 56-64.

**20.** Harmonic Measures of Fuzzy Entropy and their Normalization, **International Journal of Statistika and Mathematika**, 2014, 10(3), 47-51.

**21.** Some new parametric fuzzy entropies, **International Journal of Fuzzy Mathematics and Systems**, 4(3), 293-298.

**PUBLICATIONS PROFILE: BOOK CHAPTERS (List your published book chapters, including the title, publisher, ISBN and year)**

**PUBLICATIONS PROFILE: OTHERS (Mention any other relevant publications details)**

**CONFERENCE / WORKSHOPS/ REFRESHER/ FDP/ TRAINING ORGANIZED**

1. **Member, Organizing Committee**, National Conference on National Conference on Advanced Statistics and Applied Sciences, Ramanujan College, March 30-31, 2022.
2. **Member, Organizing Committee, FDP on** Applications of Statistical Techniques in Real World, Ramanujan College, May 01–15, 2021.

**CREATION OF ICT MEDIATED TEACHING LEARNING PEDAGOGY AND CONTENT**

**CONFERENCE/WORKSHOPS/TRAINING ATTENDED AS FACULTY MEMBER**

**INVITED LECTURES AS RESOURCE PERSON AND PAPER PRESENTATIONS:**

1. Invited talk in the three days Hand-on training workshop on **Biostatistical Tools and Techniques** organized by Patanjali Research Foundation Trust, Haridwar, Uttarakhand, India. May 14-16, 2024.
2. Invited talk in the One Week Training Program on **Experimental Design & Data Analysis in Biology** organized by Department of Botany, Maharshi Dayanand University, Rohtak, India. February 14-19, 2022.
3. Deliver a lecture as a Resource Person in a National level Refresher Course on **Statistical Tools and Techniques for Analysis of Agricultural Data** for the teachers and scientist of SAU's conducted by Academy of Agricultural Research and Education Management in collaboration with Department of Mathematics and Statistics, CCSHAU, Hisar, India. July, 8-28, 2020.

**RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)**

**AWARDS AND DISTINCTIONS:**

**ASSOCIATION WITH PROFESSIONAL BODIES:**

**OTHER ACTIVITIES: (Include any additional relevant activities or contributions not covered in the above sections.)**