

CURRICULUM VITAE

Name: Prof (Dr.) Vandana Tiwari

Designation: Professor
Department of Biochemistry
Dr. Ram Manohar Lohia Institute of Medical Sciences
Vibhuti Khand, Gomati Nagar, Lucknow



Date of Birth: 08-07-1966

Postal address: B1/176, Viram Khand Gomti Nagar
Lucknow-226010
Phone No.: +91-9415197228 (M)
+91-8887565242 (O)
Email: drvandana2166@yahoo.com

Total Publications: 111
Citations: 995
h- index: 17
i10- index: 22
Awards: 11
Membership:17
Research Grant: 41
Students Guided: 49
Scientific presentations-56
Scientific programs attended :103

Organizational and Administrative Responsibilities:

- **Head**, Department of Biochemistry, RMLIMS, Lucknow (2012-2023)
- **In-Charge**, 24 hr Emergency Lab Services, Department of Biochemistry; RMLIMS, Lucknow.
- **In-Charge**, Central Research Lab, RMLIMS, Lucknow.
- **Sub-Dean**, Paramedical Courses, RMLIMS Lucknow (2013-2025).
- **Member**, IRF Committee, RMLIMS, Lucknow.
- **Member**, Internal Complaint Committee, RMLIMS, Lucknow.
- **In-Charge**, Horticulture & Gardening work, RMLIMS, Lucknow.
- **Member Secretary**, Committee for Formulation of Policy for Allotment of Room in Admin Block & Academic Block RMLIMS, Lucknow.
- **Nodal Officer**, Management of State Referral Centre for Specialized Lab Investigations (SRCLI) Collection Center, Maharani Laxmi Bai Medical College Jhansi, UP.
- **Member**, Assessment Panel of the GATI program by the competent authority of the Department of Science and Technology, Govt. of India, New Delhi.
- **Chief Warden**, Girl Hostel, Main Campus, Dr. RMLIMS, Lucknow
- **Maker**, Institute Registration Process of NET-JRF Portal (2025-2028).
- **Expert in Interviewer Panel**, KGMU, Lucknow
- **Expert in Interviewer Panel**, Atal Bihari Vajpayee Medical University, Lucknow
- **External Examiner for MBBS and PhD-viva examination-** AIIMS Rishikesh, KGMU Lucknow, MLNMC Allahabad, BRDMC Gorakhpur, MAMC New Delhi, BHU Varanasi, Dr. RNCMC Mumbai, Government Medical College Betiya Bihar, Integral University, University of Allahabad, The Maharaja Sayajirao University Baroda, Amity University Lucknow, and for supplementary examination- AIIMS Rishikesh, ASMC Bahraich, ASMC Pratapgarh
- **Inspector** for NMC Inspection Panel.
- **Warden**, Hostel, Dr RMLIMS

Educational qualification:

Degree	University	Year	Subject
Ph.D.	BHU Varanasi	1998	Biochemistry
M.Sc.	Allahabad University	1986	Biochemistry
B.Sc.	Deen Dayal Upadhyaya Gorakhpur University	1984	Biochemistry

Professional experience:

S.N.	Type of Fellowships/ Employment	Name of Institution	Period	Nature of duties
1	Professor	Dr. RMLIMS, Lucknow	July 2023- Present	Teaching, Research & Administration
2	Professor (Jr. Grade)	Dr. RMLIMS, Lucknow	July 2019- June 2023	Teaching, Research & Administration
3	Associate Professor	Dr. RMLIMS, Lucknow	Sept 2015-June 2019	Teaching, Research & Administration
4	Assistant Professor	Dr. RMLIMS, Lucknow	10 th Sept 2012- 9 th Sept 2015	Teaching & Research
5	Associate Professor	BBD College of Dental Sciences	May-August 2012	Teaching & Research
6	Women Scientist	CSMMU & Dr. RMLIMS Lucknow	May 2009- Apr 2012	Research & Teaching
7	Clinical Biochemist	K.G.M.U. Lucknow	Jan 2004-April 2009	Chemical Pathology
8	Research Officer	K.G.M.C. Lucknow	April 2003-Jan 2004	Teaching & Research
9	Honorary Research Fellow	K.G.M.C. Lucknow	Nov 2002-March 2003	Teaching & Research
10	Research Associate (ICMR)	K.G.M.C. Lucknow	Oct 1999-Oct 2002	Teaching & Research
11	Senior Research Fellow (ICMR)	K.G.M.C. Lucknow	May 1999- Oct 1999	Teaching & Research
12	Research Fellow	K.G.M.C. Lucknow	Dec. 1990- April 1999	Teaching & Research

Scholarships, Medals, Fellowships, Awards, Distinctions or Honors

1. Directors Merit Award, Dr RMLIMS, Lucknow (14.09.2024)
2. Excellence in Medical Research Award, ELSEVIER, India, 2025
3. Fellowship of Indian Society of Hypertension (FISH)- (28.11.2025)
4. Fellowship of Indian Society For Chronomedicine (FISC)- 2024
5. Fellowship of International Society For Medical Food and Nutrition (FISMN)- 2024
6. Women Scientist in DST(WOS-A) Scheme, New Delhi (2008)
7. Research Associateship by ICMR, New Delhi
8. Senior Research Fellowship by ICMR, New Delhi
9. Junior Project Fellowship by ICMR, New Delhi
10. National Scholarship after 10th Standard
11. Ekikrit Scholarship at State level after 8th Standard

Membership:

1. Life Member, “*Indian Cancer Society*”, UP branch (January 2010 onwards).
2. Associate Member, “*Indian Association of Pathologist and Microbiologists*”
3. Life Member, “*Society of Biological Chemists in India*” (July 2013 onwards).
4. Life Member, “*Molecular Pathologists Association of India*” (June 2015 onwards).
5. Life Member, “*National Academy of Biological Sciences*” (August 2015 onwards).
6. Member, “*Biochemical Society Online Community*” (2019 onwards).
7. Member, “*American Association of Clinical Chemistry*”, (2019 onwards).
8. Member, “*American Society for Biochemistry and Molecular Biology*” (27th April 2022 ID 9504)
9. Associate Member “*Research Society for the Study of Diabetes in India*” (RSSDI – 10005)
10. Life Member, “*Epidemiology Foundation of India*” (EFI) (2024)
11. Fellow of, “*Indian Society for Chronomedicine*” (ISC) (2024)
12. Fellow of, “*International Society for Medical Food and Nutrition*” (2024)
13. Life Member, “*Association of Clinical Biochemists of India*” (ACBI) (2024)
14. Life Member, “*Indian Academy of Biomedical Sciences* (IABS) (2024)
15. Life Member, “*National Academy of Medical Sciences*” (NAMS) (2025)
16. Fellow of, “*Indian Society of Hypertension*” (2025)
17. Life Member, “*Association of Community Pharmacotherapeutics*” (ACP- ACP/LM/A107) (2025)

Teaching Experience:

- **Undergraduate Teaching (MBBS):** Three years at MLN Medical College Allahabad, Subject: Biochemistry. {From March 1988- December 1990}; Since July 2017 till date at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow.
- **Postgraduate Teaching:** Thesis guided as co-supervisor [(MDS), (MD) Pathology, Anesthesiology & Radiology, DM Neurology, DM Nephrology, PG Tutorials (From February 1996-till date).

Ph.D. & Research Activities:

- **PhD Thesis Title:** “*Characterization of Leishmania donovani antigen with special reference to their diagnostic value*”.
The most sensitive antigen of *Leishmania donovani* was characterized for diagnosis of *Kala-azar* and was compared with various serological techniques like ELISA for rapid diagnosis of *Kala-azar*.
- **WOS-A Fellowship from DST New Delhi (Three Years)**
Project Title: Tumor infiltrating lymphocytes (TIL) subset analysis, serum IL-4, IFN- γ , & TNF- α analysis for immuno-reactivity and molecular/cellular analysis of $\gamma \delta$ T-cells: A correlative study in oral carcinoma

Publications:

(Total 111: Original article-91, Case reports-1, Short communication-9, Book chapter-10)

[Google Scholar](https://scholar.google.com/citations?user=H4Bwq2AAAAAJ&hl=en) (<https://scholar.google.com/citations?user=H4Bwq2AAAAAJ&hl=en>)

Original articles (*Corresponding author)

1. Singh M, Singh V, Verma J, Kulshrestha MR, **Tiwari V**, Kumar T, Garg J. Enhanced diagnosis accuracy of tuberculous meningitis using mycolic and tuberculostearic acid via advanced mass spectrometry. *J Neurol Sci*. 2025 Dec 15;479:123748.
2. Pathak AK, Agarwal D, Singh S, Kulshrestha R, Raj Kulshrestha M, **Tiwari V***. Impact of Hidden Hunger on Pregnant Women from Underserved Communities and its Role in Anaemia. *Journal of Trace Elements in Medicine and Biology*. 2025 Oct 30:127794.
3. Agarwal S, Singh S, Singh S, **Tiwari V**, Singh V. Exploring trace metal imbalances: Serum levels of zinc, selenium, copper, lead, cadmium, and mercury, and their ratios in acne vulgaris patients: An analytical cross-sectional study. *Indian Dermatology Online Journal*. 2025 Sep 1;16(5):725-31.
4. Nigam V, Singh S, Kulshrestha R, Singh V, Kulshrestha MR, **Tiwari V**. Ionic calcium measurement in blood: A Comparative analysis of Direct Ion- selective Electrode method and formula-based predictions. *Journal of the Indian Medical Association*. 2025; 10(123);45-8.
5. Verma J, Rao N, Kulshrestha MR, Singh S, Singh S, **Tiwari V**, Sharma MT. Exploring the Association Between Potentially Toxic Elements and Chronic Kidney Disease of Unknown Etiology in Eastern Uttar Pradesh, India. *Biological Trace Element Research*. 2025 Jul 2:1-5.
6. Singh N, Verma R, Misra D, Kushrestha MR, **Tiwari V**, Kulshrestha R. “Vaginal fluid creatinine as a promising diagnostic biochemical marker in premature rupture of membranes”. *Indian J Obst Gyn Res* 2025;12(2):229–234.
7. Singh S, Verma J, Gupta N, Pathak AK, Rajput MS, **Tiwari V**, Kulshrestha MR. “Association of Arsenic and Nickel with Markers of Insulin Resistance and Beta Cell Dysfunction: A Case–Control Study in Indo Gangetic Plain”. *Biological Trace Element Research*. 2025 Mar 25:1-9.
8. Singh S, Singh S, **Tiwari V**, Agarwal S, Singh C, Singh V. “Unlocking Vitiligo’s Metal Code: A Case-Control Study of Serum Levels of Trace Elements in Vitiligo Patients”. *Pigment International*, 12(1):28-39, January-April 2025.
9. Singh S, Verma J, Gupta N, Pathak AK, **Tiwari V**, Rajput MS, Kulshrestha MR. Interplay of toxic metal levels and endoplasmic reticulum stress gene profile in type 2 diabetes mellitus. *Gene Reports*. 2024 Dec 1;37:102019.
10. Singh S, Verma J, Kulshrestha MR, Singh A, Srivastava S, **Tiwari V***. Pyrethroid Levels Amplify Asthma Severity in Children via Elevating Eosinophils, IgE, and Compromising Lung Function. *Indian Journal of Clinical Biochemistry*. 2024 Nov 29:1-0.
11. Singh S, Kulshrestha MR, Singh A, Srivastava S, **Tiwari V***. Elevated White Blood Cell Subsets and Imbalances in Iron, Magnesium, and Vitamin D3 Are Linked to Severity of Pediatric Asthma. *African Journal of Biological Sciences*. 2024 6(14)7854-7864.
12. Tiwari P, Srivastava JK, **Tiwari V**, Gupta M. Nutritional Status and Dietary Pattern of Government School Going Adolescents of Lucknow city with Reference to Recommended Dietary Allowances-ICMR 2024, India. *Clinical Epidemiology and Global Health*. 2024:101757.

13. Verma J, Rao N, Kulshrestha MR, **Tiwari V**, Sharma MT, Chandra A. “Chronic kidney disease from agricultural communities—association and accumulation of hexachlorobenzene, malathion, and parathion pesticides”. *Toxicology Environmental Health Sciences*. 2024.
14. Dhingra C, Rao N, Singh S, Pathak AK, **Tiwari V**, Kulshrestha MR, and Verma J. “Comparative Analysis of HbA1c Estimation Using Immunoturbidimetry and High-Pressure Liquid Chromatography Methods in Non-Dialysis Chronic Kidney Disease Patients”. *EJIFCC*. 2024 Oct 30;35(3):195-205.
15. Kulshrestha R, Singh S, Singh V, Nigam V, Kulshrestha MR, **Tiwari V**. Ionic Calcium Measurement in Blood: A Comparative Analysis of Direct Ion-Selective Electrode Method and Formula-based Predictions. *Journal of Indian Medical Association*, 2025; 10(123);45-8.
16. Kulshrestha MR, **Tiwari V**, Singh S, Pathak AK. An Approach to include the cost of consumables in Biochemistry Analyzer Procurement on the Reagent Rental Model alleviates hidden expenses. *EJIFCC*. 2024 Oct 30;35(3):182-188.
17. Kulshrestha R, Singh S, **Tiwari V**, Nigam V, Kulshrestha MR. Anemia profiling in antenatal women at a tertiary care center in northern India: An observational study. *Indian Journal of Obstetrics and Gynecology Research*. 2024;11(1):53-57.
18. Misra D, Singh N, Faruqi M, **Tiwari V**, Kumar V, Zafar F. Evaluating the Utility of Liver Transaminases as Predictors of Feto-Maternal Outcome in Lieu of Serum Bile Acids in Intrahepatic Cholestasis of Pregnancy: A Prospective Observational Study. *J Obstet Gynaecol India*. 2024;74(2):113-118.
19. Shukla A, Awasthi NP, Sharma P, **Tiwari V**, Sharma VK, Kulshrestha MR, Singh P, Husain N. Evaluation of Diagnostic Efficacy of Novel Red Blood Cell Parameters as Potential Screening Test for Detecting Latent Iron Deficiency in Blood Donors. *Indian J Hematol Blood Transfus*. 2024;40(1):139-145.
20. Tiwari P, **Tiwari V**, Kulshrestha MR, Srivastava M, Kanojia S. “Efficacy of dietary assessment and anthropometry parameters to evaluate nutritional status of school going adolescents in Lucknow, Uttar Pradesh, India”. 2024; DOI:10.48047/AFJBS.6.10.2024.4348-4358.
21. Singh S, Kulshrestha MR, Pathak AK, Srivastava S, Singh A, **Tiwari V**. “Transfluthrin Is Associated with High Susceptibility to Asthma in Children with Promoter Variants of Beta Chain of High-Affinity Receptor IgE and Tumour Necrosis Factors- α Genes”. *Biochemical Genetics*. 2023;19:1-8.
22. Srivastav S, **Tiwari V**, Singh S, Karoli R, Gupta N, Bhattacharya P. Low serum levels of Zinc, Selenium and Vitamin D3 are biomarkers of airway inflammation and poor asthma control- a two-centre study. *Cureus*. 2023;15(6):e41082.
23. Agarwal J, Awasthi NP, Singh S, **Tiwari V**. Sequential shifting in T-Helper and T-Cytotoxic subsets cells population in mild and severe COVID-19 patients infected with variant B.1.61. *Cureus*. 2023; 15(6): e40556.
24. Ikbal SK, Gupta S, **Tiwari V**, Dhinsa G, Verma N. “Association of serum interleukin-10 level with glycemic status to predict glycemic alteration with periodontitis: A cross sectional observational study”. *Contemporary Clinical Dentistry*. 2023; 14:152-6.
25. **Tiwari V**, Kulshrestha MR, Pathak AK, Singh S. “An Unknown Peak in Hemoglobin Chromatogram is Associated with Diabetic Markers and Increased Requirement of Oxygen Support in COVID-19 Patients”. *Research Journal of Biotechnology*. 2023;18(6):29-40.
26. Pathak AK, **Tiwari V**, Kulshrestha MR, Singh S, Singh S, Singh V. Impact of essential metals on insulin sensitivity and fetuin in obesity-related type 2 diabetes pathogenesis. *J Diabetes Metab Disord*. 2023; 22:703–712.

27. **Tiwari V**, Agarwal J, Pathak AK, Singh S. Dynamic Changes in Circulatory Cytokines and Chemokines Levels in Mild to Severe COVID-19 Patients. *Indian J. Clin. Biochem.* 2023;38: 212–219.
28. Awasthi NP, Mishra S, **Tiwari V**, Agarwal J, Das PK, Jain P, Husain N. Monocyte HLADR and Immune Dysregulation Index as Biomarkers for COVID-19 Severity and Mortality. *Indian Journal of Clinical Biochemistry.* 2023;38(2):204-11.
29. Talukedar L, Saha S, Dhinsa K, Rai A, **Tiwari V**, Trivedi H. Comparison of Craniofacial Morphology Characteristics Along with Dental Caries Status and Salivary Properties of Operated Cleft Lip and Palate Patients with Noncleft Patients. *Journal of Indian Society of Pedodontics and Preventive Dentistry.* 2022:265-273.
30. Virendra S, Pandey H, Misra V, **Tiwari V**, Pallavi S, Singh D. Hypolipidemic effect of [6]-Gingerol-loaded Eudragit polymeric nanoparticles in high-fat diet-induced rats and Gamma scintigraphy evaluation of gastric-retention time. *Journal of Applied Pharmaceutical Sciences.* 2022;12(06):156-163.
31. Singh NP, **Tiwari V**, Kulshrestha MR, Singh S, Vamne A. Relationship between Lipid Profile and Apolipoprotein A1 and Apolipoprotein B with Cardiovascular Disease. *International Journal of Recent Scientific Research.* 2022:13(04C): 978-983.
32. Karoli R, Gupta N, Karoli Y, Kulshreshtha MR, **Tiwari V**. Neutrophil Gelatinase-associated Lipocalin (NGAL) as a Marker of Renal Tubular Injury in Metabolic Syndrome Patients with Hyperuricemia. *J Assoc Physicians India.* 2022; 69(12):11-12.
33. Kulshrestha MR, Raj A, **Tiwari V**, Chandra S, Tiwari BC, Jha A. Evaluation of dual marker approach using hFABP and hsTnI as alternate of serial sampling for the diagnosis of acute myocardial infarction. *eJournal of International Federation of Clinical Chemistry.* 2022: 33(1);43-55.
34. Kumari S, Mishra S, Husain N, Verma T, **Tiwari V**, Kaif M, Agarwal A, Rastogi M, Shuka S, Sonkar AA. Comparison of Circulating DNA in Malignant Neoplasia from Diverse Locations: Investigating A Diagnostic Role. *Indian Journal of Pathology & Microbiology.* 2022;65:93-99.
35. Awasthi NP, **V Tiwari**, Riaz K, Arshad S, Husain N. Revealing and IgG4 analysis to factor VIII in haemophilia-A patients with and without inhibitors. *Transfusion and Apheresis Science.* 2021;61(3):103343.
36. Verma T, Kumari S, Mishra S, Rastogi M, **Tiwari V**, Agarwal GR, Anand N, Husain N. Circulating free DNA as a marker of response to chemoradiation in locally advanced head and neck squamous cell carcinoma. *Indian Journal of Pathology & Microbiology.* 2020;63 (4):521-526.
37. S Mishra, **Tiwari V**, Arora A, Gupta S, Anand N, Husain N. Increased Expression of Oct-4, Nanog and CD24 Predicts Poor Response to Chemo-radiotherapy and Unfavourable Prognosis in Locally Advanced Oral Squamous Cell Carcinoma. *Asian Pac. J. Cancer Prev.* 2020;21(9):2539-2547.
38. Chaturvedi P, Singh AK, **Tiwari V**, Thacker AK. Brain derived neurotrophic factor levels in acute stroke and its clinical implications. *Brain Circulation.* 2020; 6:185-90.
39. Chaturvedi P, **Tiwari V**, Singh AK, Qavi A, Thacker AK. Depression impedes neuroplasticity and quality of life after stroke. *J Family Med Prim Care.* 2020; 9:4039-44.
40. Singh L, Singhai A, Babu S, Singh VK, Wakhlu A, Sonkar S, **Tiwari V**, Singh US. Utility of serum and urinary free light chains as non-invasive biomarkers of activity in lupus nephritis. *Int. J. of Med. Reviews and Case Reports.* 2021; 5(1):1-6.

41. Chaturvedi P, Singh AK, **Tiwari V**, Thacker AK. Post-stroke BDNF concentration changes following proprioceptive neuromuscular facilitation (PNF) exercises. *J Family Med Prim Care*, 2020; 9:3361-9.
42. Misra M, **Tiwari V**, Tripathi P. Awareness, Attitude and Practices Regarding Cervical Cancer Screening and Vaccination among North Indian Women Population. *Journal of Biosciences and Medicines*. 2020;8;73-88.
43. Chaturvedi P, Singh AK, **Tiwari V**, Thacker AK. Diabetes mellitus type 2 impedes functional recovery, neuroplasticity and quality of life after stroke. *Journal of Family Medicine and Primary Care*. 2020; 9(2): 1034-41.
44. Narayan S, Mishra T, Singh V, Kumar T, Singh S, **Tiwari V**, Dikshit N, Singh A. Correlation of Radiographic Findings of Sacroiliac Joint with Clinical Profile in Patients with Inflammatory Low Back Pain: An Observational Study. *Indian J Musculoskelet Radio*. 2019; 1(2);92-96.
45. Agarwal A, **Tiwari V**, Kumari S, Husain N. Prognostic Value of CA 19.9 and CA242 in Gallbladder Cancer – An Exploratory Study. *International Journal of Contemporary Medical Research*. 2019;6(6); F4-F7.
46. Arshad S, **Tiwari V**, Husain N, Nieyaz A, Awasthi NP. Correlation of B Cell Activating Factor, B Cell Maturation antigen and Other Cytokine Profile with Inhibitor Status in Hemophilia A. *Egyptian Journal of Haematology*. 2019; 44:149-56.
47. Singh V, Tripathi P, Kulshrestha MR, **Tiwari V**. Obesity and High Sensitivity C-Reactive Protein Level in Indian Population. *EC Cardiology*. 2019; 6(10):1082-1088.
48. Kulshrestha MR, **Tiwari V**, Tripathi P. Serum Lactate levels in Acute Myocardial Infarction. *International Journal of Clinical Biochemistry and Research*. 2019;6(3):353-355.
49. Tripathi P, Kulshrestha MR, **Tiwari V**. Serum Lipoprotein (A) in the etiology of Acute Myocardial Infarction. *Saudi Journal of Medicine*. 2019; 4(7):551-553.
50. Kulshrestha MR, **Tiwari V**, Tripathi P. Serum Apolipoprotein levels in hypothyroidism. *Saudi Journal of Pathology & Microbiology*. 2019;4(6):483-487.
51. Chaturvedi P, Singh AK, Kulshreshtha D, **Tiwari V**, Maurya PK, Thacker AK. Effects of early proprioceptive neuromuscular facilitation exercises on sensory- motor recovery of upper extremity and neuroplasticity in the patients with acute stroke. *Med. Res. Chron*. 2018; 5(5):378-390.
52. Mishra A, Sharma AK, **Tiwari V**. Intact parasite-antigen ELISA test: a new dimension for serodiagnosis of Amoebiasis. *Journal of Applied & Natural Science*; 2018;10 (3):976-980.
53. Chaturvedi P, Singh AK, Thacker AK, **Tiwari V**, Kulshreshtha D. A18894 Depression after stroke: the effects on neuroplasticity and quality of life. *Journal of Hypertension*. 2018;36:e261.
54. Chaturvedi P, Singh AK, **Tiwari V**, Kulshrestha D, Maurya PK, Thacker AK. Proprioceptive Neuromuscular Facilitation (PNF) vs. Task Specific Training in Acute Stroke: The Effects on Neuroplasticity. *MOJ Anatomy & Physiology*; 2018;5(2):154-58.
55. Mishra A, **Tiwari V**, John JE, Shukla RK, Kulshrestha MR. Study on Serum Magnesium Level in Type 2 Diabetes Mellitus in North Indian Population. *Journal of Medical Science and Clinical Research*. 2017;5(10):28842-48.
56. Khanna N, **Tiwari V**, Kulshreshtha D, Kulshrestha MR, Maurya PK, Verma SL, Singh AK, Thacker AK. Cognitive decline due to impaired Homocysteine metabolism in adults on antiepileptic Monotherapy: A Prospective Study. *MGM Journal of Medical Sciences*. 2017; 4(4): 171-176.

57. **Tiwari V**, Malhotra K, Khan K, Maurya PK, Singh AK, Thacker AK, Husain N, Kulshrestha D. Evaluation of Polymerase Chain Reaction in Nerve Biopsy Specimens of Patients with Hansen's disease. *Journal of Neurological Sciences*. 2017; 380: 187-190.
58. **Tiwari V**, Husain N, Awasthi NP, Pandey CM. Cost-Effectiveness Analysis of Congenital Hypothyroidism in Neonates Born in Uttar Pradesh: A Pilot Study. *European Journal of Pharmaceutical and Medical Research*. 2017;4(9):394-399.
59. Khanna N, Verma SL, Maurya PK, **Tiwari V**, Kulshrestha D. Effect of Valproate and Oxcarbazepine Therapy on Asymmetric Dimethyl Arginine (ADMA) and Homocysteine Levels in Newly Diagnosed Epileptic Children. *Journal of Advanced Medical and Dental Sciences Research*. 2017;5(7):57-63.
60. Chaturvedi P, **Tiwari V***, Singh AK, Kulshrestha D, Maurya PK, Thacker AK. Effect of Early Proprioceptive Neuromuscular Facilitation Exercises on Functional Outcome and Quality of Life in Patients with Stroke. *MGM Journal of Medical Sciences*. 2017;4(3):1-4.
61. **Tiwari V**, Srivastava AN, Misra S, Husain N. Augmentation of TIL-CD3 in Oral Cancer: Variation in Relation to Stage & Grade of Disease. *International Journal of Pharmaceutical Sciences & Research*. 2016; 7(6): 2476.
62. Dutta R, **Tiwari V**, Pandey AC. Synthesis of Gd₂O₃:Eu³⁺ Nanoparticles for Biomedical Applications. *International Journal of Recent Scientific Research*. 2016; 7(2); 8784-8788.
63. Dutta R, Sharma PK, **Tiwari V**, **Tiwari V**, Patel AB, Pandey R, Pandey AC. Engineering of Gadofluoroprobes: Broad Spectrum Applications from Cancer Diagnosis to Therapy. *Applied Physics Letters*. 2014;104:023703.
64. Bansal C, Singh US, Misra S, Sharma KL, **Tiwari V**, Srivastava AN. Comparative evaluation of the modified Scarff-Bloom-Richardson grading system on breast carcinoma aspirates and histopathology. *Cyto Journal*. 2012; 9:4.
65. Bansal C, **Tiwari V**, Singh US, Srivastava AN, Mishra JS. Cell Cannibalism: A cytological study in effusion samples. *Journal of Cytology*. 2011;28(2): 57-60.
66. Jain A, Shukla VK, **Tiwari V**, Kumar R. Antibiotic resistant pattern of Group A beta-hemolytic streptococci isolated from North Indian children. *Indian J Med Science*. 2008; 62(10):392-6.
67. Goel MM, Budhwar P, Goel M, **Tiwari V**, Jain A. Nucleic acid amplification of Mycobacterium tuberculosis complex DNA from archival fine needle aspiration smear scrapings vs. fresh fine needle aspirates of tuberculosis lymphadenitis. *Acta Cytologica*. 2006; 50(4):393-7.
68. Garg N, Singh R, Dixit J, Jain A, **Vandana V**. Levels of lipid peroxides and antioxidants in smokers and nonsmokers. *Journal of Periodontal Research*. 2006; 41(5): 405-10.
69. Singh M, **Tiwari V**, Jain A, S Ghoshal S. Protective activity of picroliv on hepatic amoebiasis associated with carbon tetrachloride toxicity. *Indian J Med Res*, 2005;121(5):676-82.
70. Jain A, Verma RK, **Tiwari V**, Goel MM. Dot-ELISA vs PCR in fine needle aspirates of tubercular lymphadenitis- a developing country's prospective. *Acta Cytologica*. 2005;49:17-21.
71. **Tiwari V**, Jain A, Verma RK. Application of enzyme amplified detection of mycobacterial DNA in diagnosis of pulmonary and extra pulmonary tuberculosis, in India. *Indian Journal of Medical Research*. 2003; 118:224-228.

72. Jain A, Verma RK, **Tiwari V**, Goel MM. Development of a new antigen detection Dot- Elisa for diagnosis of tubercular lymphadenitis in fine needle aspirates. *J. Microbiological Methods*. 2002;53:107-112.
73. Guleria RS, Jain A, **Tiwari V**, Misra MK. Protective effects of green tea extracts against the erythrocytic oxidative stress injury during Mycobacterium tuberculosis infection in mice. *Molecular and Cellular Biochemistry*. 2002; 236(1-2):173-181.
74. Jain A, **Tiwari V**, Guleria RS, Verma RK. Qualitative evaluation of mycobacterial DNA extraction protocols for polymerase chain reaction. *Molecular Biology Today*. 2002; 3: 43-47.
75. Jain A, Berthawal M, **Tiwari V**, Maitra SC. Immune complex mediated lesions in experimental kala-azar: An ultrastructural study. *Indian Journal of Pathology and Microbiology*. 2000;43(1):13-16.
76. Jain A, Agarwal M, **Tiwari V**. Role of ethylene diamine tetra acetic acid as a synergist with a quaternary ammonium antiseptic agent. *The Antiseptic*. 1997; 94(6):184-186.
77. Jain A, Agarwal M, **Tiwari V**. Comparative microbiological profile of antiseptic against gram negative bacilli tested in vitro. *The Antiseptic*. 1997; 94(5): 146-147.
78. Jain A, **Tiwari V**. Evaluation of two ELISA for kala-azar diagnosis. *Indian Journal of Medical Microbiology*. 1997; 15(3):1-3.
79. Jain A, **Tiwari V**, Agarwal M. Effect of Leishmania donovani antigens on superoxide anion generation by mice polymorphs, in vitro. *Indian Journal of Medical Research*. 1996; 104: 250-253.
80. Agarwal M, **Tiwari V**, Jain A. Seroreactivity of promastigote and amastigote forms of Leishmania donovani in immunoperoxidase assay. *Indian Journal of Microbiology*. 1996; 36:115-116.
81. Agarwal M, Jain A, **Tiwari V**. Comparative evaluation of serological tests for diagnosis of Visceral leishmaniasis. *Indian Journal of Experimental Biology*. 1996; 34:734-738.
82. Jain A, Agarwal M, **Tiwari V**. In vitro microbiological study of two new antiseptic agents. *The Antiseptic*. 1996; 93: 165-166.
83. **Tiwari V**, Jain A, Agarwal M, Mittal B, Pandey HP. Evaluation of antibody responses in Indian kala-azar by immunoblot. *Biochemistry and molecular biology international*. 1995;37(5):959-64.
84. Jain A, Agarwal M, **Tiwari V**. In vivo microbiological study of two new antiseptic agents. *The Antiseptics* 1995; 92: 340-341.
85. Jain A, Agrawal M, **Tiwari V**. An indirect immunoperoxidase assay for rapid serodiagnosis of visceral leishmaniasis. *Indian Journal of Experimental Biology*. 1994;32(11):822-5.
86. Banerjee M, **Tiwari V**, Agarwal M, Jain A. A study of cases of Visceral leishmaniasis. *Indian Journal of Bio-Research Medical Volume* 25:1994.
87. Jain A, **Tiwari V**. Plasmid patterns of Shigella dysenteriae type I and its correlation to antibiotic sensitivity pattern. *Journal of Microbial Biotechnology*. 1993;8(1):1-6.

Article in press

1. Awasthi NP, Mishra S, Jain P, Bajpayee A, Chauhan J, Aswal SS, Das PK, **Tiwari V**, Agarwal J, Husain N. Immune dysregulation index in critically ill and mild patients with COVID-19: Role in severity and mortality prediction. *International Journal of Infectious Diseases*, 2024.

2. A comparative evaluation of the dental caries status and salivary properties of children with/without molar incisor hypomineralization of 8-16 years age in Lucknow. *World Journal of Dentistry*, 2024 (wjoud_24_272).
3. "Association of Toll-Like Receptor 4, Matrix Metalloproteinase 9 and Tumor Necrosis Factor-Beta with the risk of oral cancer". (*Oral Science International*)
4. Singh S, Agarwal S, Singh S, **Tiwari V**, Singh V. "Exploring Trace Metal Imbalances: Serum Levels of Zinc, Selenium, Copper, Lead, Cadmium, and Mercury, and their Ratios in Acne Vulgaris Patients: An Analytical Cross-sectional Study" (*Indian Dermatology Online Journal*) .
5. Chaturvedi P, Singh AK, **Tiwari V**, Kaur S, Amita Kumar A, Sharma B, Haque S, Tuli HS. "Do the levels of BDNF in acute stroke reveal long term stroke recovery?" *Wiener klinische Wochenschrift*, 2025
6. "Utility of Mentzer Index in Discriminating Beta-Thalassemia Trait and Iron Deficiency Anemia in Pregnant females." *Journal of Laboratory Physicians# JLP_42_2026*
- 7.

Case Report

1. Srivastava S, **Tiwari V**, Sen M. Rare cases of filarial chyluria in children. *International Medical Case Reports Journal*. 2022;15 135–139.

Short Communication

1. **Tiwari V**, Shahi Y, Pathak A K, Agarwal A. Dysregulation of circular RNAs and endoplasmic reticulum stress response in oral carcinoma. APFCB 2024 (Accepted)
2. Shukla S, Husain N, Malhotra KP, **Tiwari V**. Increased copy number of anaplastic lymphoma kinase gene signal in lung carcinomas: Is it significant? *Journal of Microscopy and Ultrastructure*. 2019 Oct;7(4):198.
3. Pathak A, Kant S, Pandey R, **Vandana T**, Husain N. Independent and Combined Effects of CYP and GST Genotypes as Risk Modifiers in Non-Small Cell Lung Cancer. In *Laboratory Investigation* 2020 Mar 1 (Vol. 100, No. Suppl 1, pp. 1810-1811). 75 VARICK ST, 9TH FLR, NEW YORK, NY 10013-1917 USA: Nature Publishing Group.
4. **Tiwari V**, Nagzarkar S, Sonkar AA, Kumari S, Husain N. Circulating Cell Free DNA Levels in Oral Squamous Cell Carcinoma. *Laboratory Investigation* 2017; 97:333A-334A.
5. **Tiwari V**, Kumar S, Srivastava S, Srivastava A N. Telomerase h-TERT expression in oral cancer smears. *Acta Cytologica*: 2010, Volume 54; 3(S) 456.
6. **Tiwari V**, Husain N, Srivastava AN, Misra S, Kumar S. Differential infiltration of CD8+ and CD4+ cells in oral cancer and its association with clinical outcome: an immunohistochemical study. In *Histopathology* 2012 Oct 1 (Vol. 61, pp. 139-139). 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL.
7. **Tiwari V**, Jain A, Agarwal M, Mittal B, Pandey HP. Immunoblotting in Serodiagnosis of Visceral Leishmaniasis. *Indian Journal of Pathology And Microbiology* 1995: 37, S131-S131
8. Goel MM, Budhwar P, Goel M, **Tiwari V**, Jain A. Nucleic Acid Amplification of Mycobacterium tuberculosis Complex DNA from Archival Fine Needle Aspiration Smear Scrapings vs. Fresh Fine Needle Aspirates of Tuberculous Lymphadenitis. *Acta Cytologica*: 2010, Volume 54; 3(S) 456.
9. Awasthi N, **Tiwari V**, Naqvi S, Das P, Aswal S, Husain N, Tripathi A. Haematological, coagulation and biochemical abnormalities in COVID-19 patients in India: Do we behave differently? *Research and Practice in Thrombosis and Haemostasis*. 5 (Suppl 2), 2021.

Book chapter/Monograph:

1. PCR Techniques: Bench Monograph; (2009) Workshop Manual
2. Immunocytochemistry Protocols: (2011) Workshop Manual
3. PCR Trouble Shootings: (2013) Workshop Manual on "HPV detection by PCR in LBC Samples".
4. Basics of Fish Probe Design: (2014) Workshop Manual on "HPV detection by PCR in LBC Samples".
5. Singh S, Verma J, **Tiwari V***, Kulshrestha MR (2024). "Association of Pesticides with Adolescent Asthma and Bronchial Hyper-reactivity". In: Aditi Singh, Abhisek Nandy (eds) Lifestyle Diseases in Adolescents: Diseases, Disorders, and Preventive Measures. 1: 49. <https://doi.org/10.2174/9789815274431124010006>. Bentham Science Publishers.
6. Pandey AK, Kulshrestha MR, Singh M, Pathak AK, **Tiwari V*** (2025). "Application of Flow Cytometry in the Development of New Alternative Model Systems in Biomedical Research". In: Pant A, Khare P, Pandey AK (eds) Flow Cytometry: Applications in Cellular and Molecular Toxicology. Springer, Singapore. https://doi.org/10.1007/978-981-97-9758-5_13.
7. Nigam K, Verma J, Kulshrestha MR, **Tiwari V**, Pathak AK (2025). "Xenobiotics Mediated Alterations in DNA Content and Cell Cycle: Flow Cytometry-Based Analysis". In: Pant, A., Khare P, Pandey AK (eds) Flow Cytometry: Applications in Cellular and Molecular Toxicology. Springer, Singapore. https://doi.org/10.1007/978-981-97-9758-5_2.
8. Singh S, Kulshrestha MR, Singh A, **Tiwari V*** (2025). "A Silent Indoor Threat: The Role of Mosquito Repellent Compounds in Pediatric Asthma Pathogenesis". Advance in Technology and Science (Pioneering the Future of Industry). ISBN(Paperback): 978-93-6581-991-5. Published by Natals Publication.
9. Singh S, Kulshrestha MR, **Tiwari V**. "Endoplasmic Reticulum Expression Key Player in Type 2 Diabetes Pathogenesis". Advance in Technology and Science (Pioneering the Future of Industry). ISBN(Paperback): 978-93-6581-991-5 (2025). Published by Natals Publication.
10. Swaroop S, Gupta A, **Tiwari V**, Kulshreshtha D (2025). "Post-stroke inflammation in humans: Mechanisms, biomarkers, and clinical implications. Functional Biology and Biotechnology" (Pg. 16-26). Editors: M Serajuddin, Monisha Banerjee, Kalpana Singh. Excellent Publishing House, New Delhi. ISBN No. 978-93-94086-81-4.

Research Projects:

(Total 41; International:1; Extramural, PI:6, Co-PI:13; Intramural, PI:5, Co-PI:16)

International project

1. Co-Investigator in project entitled "Lymphopenia in COVID-19: implication in pathogenesis and disease management" (IUSSTF Proposal Reference Number: IUSSTF/VN-COVID/011/2020)

Extramural research grants

Principal Investigator

1. Neuron-Enriched Plasma Exosomes as Liquid Biopsy for Molecular Profiling in Alzheimer's Pathogenesis: A Case-Control Study. (*Dr Anugya Srivastava, DHR Women Scientist, 2025-2028*)
2. Effect of common dietary chemicals on advanced glycation end products and metabolic dysregulation in diabetes. (*Council of Science & Technology, Uttar Pradesh, Oct 2025- Oct 2028*)
3. Investigating the association between Vitamin K2-MR-7 level and osteocalcin carboxylation with metabolic indices in newly diagnosed type-2 diabetes mellitus patients (*Short Term Studentship, DHR, New Delhi, 2025*)
4. Clinical significance of Circular RNAs interaction with unfolded protein response and tumour-promoting cytokines in oral cancer patients. Research Associate Fellowship to *Dr. Yadvendra Shahi* (Funded by-ICMR, New Delhi, Rs. 2100000) (*completed*)
5. The role of highly sensitive Troponin-I, highly sensitive C Reactive Protein and NT-proBNP in predicting coronary artery stenosis in patients undergoing Coronary Artery Angiography. Research Associate Fellowship to *Dr. Pratima Tripathi* (Funded by ICMR, New Delhi) (*completed*)
6. To study the status of vitamins and minerals in pregnant women and its association with nutrition depletion and outcome (Short Term Studentship, DHR, New Delhi, Completed)

Co-Investigator

1. Genome-Wide Identification and Functional Validation of High-Risk Genetic Loci in Genes Encoding Hormones, Growth Factors, and Tumor-promoting Cytokines Association with Fibroadenoma Susceptibility in Women with Insights into the role of Endocrine-Disrupting Chemicals (*PI: Dr. Priyanka Rai, Funded by Council of Science & Technology, Uttar Pradesh*).
2. Role of Salivary Extracellular Vesicles Associated Micro-RNA Profiling as a Potential Biomarker for the Diagnosis, Prognosis and Molecular Correlation in Oral Squamous Cell Carcinoma: A Pilot Study.(*PI: Dr. Nidhi Anand; Ref. no. CST/D- 5447, Dated 22-08-2025*)
3. Isolation and Characterization of Plasma-Derived Pancreatic Beta- Cell Exosomes for Diagnostic Applications in Diabetes. (*PI: Dr Nikhil Gupta, Funded by Council of Science & Technology, Uttar Pradesh*)
4. The effectiveness of telemonitoring in controlling hypertension in chronic kidney disease (THICK Study): A randomized control trial. (*Dr Abhilash Chandra, Funded by Council of Science & Technology, Uttar Pradesh, RefNo. CST/-1175; Dated 22-08-2025*)
5. Insecticides bioaccumulation and its interplay with detoxifying enzyme, genetic variations and DNA modifications: A triad influencing chronic kidney diseases of unknown etiology. (*Funded by CST UP, PI: Dr Manish Raj Kulshrestha*), ongoing, 2024
6. Methylation profiling and copy number variation in gallbladder Cancer -investigating prognostic and therapeutic subset's. (*CST, UP funded project, PI: Dr Anshuman Singh*) ongoing, 2024
7. Estimation of Bisphenols in Urine Samples of Pregnant Women Visiting Tertiary Care Centre. (*Uttarakhand State CST, PI: Dr. Jayanti Pant Associate Professor Physiology AIIMS Rishikesh*)
8. Role of circular & long non-coding RNAs as regulator of neuroinflammation and its correlation with clinical and radiological severity of in Ischemic stroke patients. (*Funded by ICMR, New Delhi, PI:Dr Dinkar Kulshrestha*)

9. The role of Endoplasmic Reticulum Stress and long non-coding RNAs and interplay of their cellular targets in Type 2 Diabetes. Senior Research Fellowship to *Ms. Shefali Singh* (Funded by ICMR, New Delhi, 2021)
10. To study the Role of Agrochemicals and Genetic Polymorphism in Agrochemical Metabolism Enzyme Genes in Determining the Susceptibility of Chronic Kidney Disease of Unknown Etiology in Northern India- A Case-Control Study. (Funded by Indian Society of Nephrology)
11. Assessment of macronutrient and micronutrient levels of school going-adolescents in Lucknow metropolitan community and their relation with ethno-healthy diets and prevalent eating patterns. (Grant: 60,0000/-Department of Health Research, PI: Dr Poonam Tiwari).
12. Polymorphism study of the CYP and GST gene family and its association with up-regulation of cell death in non-small cell lung cancer patients. (Ref No. CST/SERPD/D-2253) (Funded by CST, UP).
13. Genotypic drug resistance pattern in pulmonary tuberculosis patients with type 2 diabetes mellitus. (Dr. Arpita Singh, Pharmacology, Dr RMLIMS, Funded by NTEP, New Delhi) (Ongoing)

Intramural research grants

Principal Investigator (PI)

1. Genome-Wide Transcriptomic Landscape of lncRNAs-mRNAs Network and Their Relation with Insulin Resistance: Insight into potential Role in Type 2 Diabetes Mellitus Pathogenesis: A Pilot Study” (completed).
2. Cost Effectiveness Analysis of Screening for Congenital Hypothyroidism in Neonates in India April 2013-March 2015 (Completed).
3. Evaluation of Changes in Cell Free Tumor DNA Levels in Locally Advanced Head and Neck Cancer Patients Undergoing Radiotherapy 2016-2018 (Completed).
4. Is Feutin-A is a link between obesity and Type 2 Diabetes Mellitus” (Completed)
5. Study of Hemoglobin HPLC Pattern in Covid19 Patients (Completed)

Co-Investigator (Co-PI)

1. CD24, Oct-3/4 and Nanog in Oral Cancer- Effects on Chemoradiation Response (Completed).
2. Evaluation of PCR in Nerve and Skin Biopsy Specimens of Patients with Hansen’s disease. April 2013-March 2015 (Completed).
3. Evaluation of prognostic and predictive value of CA19-9 and CA242 in gallbladder cancer. November 2013-December 2015 (Completed).
4. The correlation of Cystatin C, VEGF-A and BDNF levels with early neurological deterioration (END) in acute ischemic stroke patients. (Completed).
5. Levels of Serum Visfatin & Chemerin in Polycystic Ovarian Syndrome. 2018 (funded).
6. Association of cadmium (Cd) and lead (Pb) exposure in relation to serum insulin levels, insulin sensitivity and diabetes mellitus: A cross-sectional study. (Completed)
7. Serum level of Vitamin D and Trace Elements in Bronchial Asthma: A Cross Sectional Study. (Completed)
8. Role of Repressor Element-1 Silencing Transcription Factor (REST) in the Regulation of Pathogenic Proteins (tau and amyloid- β) in Astrocyte Derived Blood Extracellular Vesicles in Pathogenesis of Alzheimer’s Disease. (Ongoing).

9. Genomic Wide Association Study for Identification of Genetic Determinants and Clinical Phenotypic Heterogeneity in Cervical Dystonia Patients: A Pilot Study. (Completed).
10. To assess Atopic Sensitization and Immuno Dysregulation in Under 5 Children with Recurrent Wheeze: A Longitudinal Study. (Completed).
11. Role of Metallothionein and Divalent Metal Transporter Genes for Toxic Metals Sensitivity: A Inter-Relationship Study among Chronic Kidney Disease. (Completed).
12. Mycolic acid levels and tuberculostearic acid levels in Cerebrospinal fluid of patients with tubercular meningitis and bacterial meningitis using mass spectrometry and diagnostic utility of the same in differentiating them: A Pilot Study. (Completed).
13. Identification of Differentially Expressed Coding and Non-coding Transcripts and Their Clinical Significance in Metastatic Prostatic Cancer. (Ongoing)
14. Genomic Landscape of Loss of Heterozygosity and Copy Number Variation Signature in Non-syndromic Hearing Loss Associated Gene in Children. (ongoing)
15. Investigating the Molecular Mechanism of Arsenic and Zinc Dynamics on Beta Cell Function in Type II Diabetes Pathogenesis. (Ongoing).
16. Study to estimate the plasma concentration of first line anti-tubercular drugs in drug sensitive tuberculosis patients with type II diabetes mellitus and its relation with treatment outcomes. (2025-2027)

Supervisor/Co-supervisor in PhD, DM, MD, MDS Thesis

(Total-49, PhD-11, DM-4, MD-18, MDS-15, MPhil-1)

PhD. Thesis

1. Effect of Proprioceptive Neuromuscular Facilitation (PNF) Exercises on Functional Outcome, Quality of Life and BDNF Estimation to Access Neuroplasticity in the Patients with Stroke. Dr. Poonam Chaturvedi, 2015.
2. To assess the Levels of Common Pesticides in Children with Bronchial Asthma. Ms. Shivani Singh, 2021
3. Study on the Role of Immune Mediators and Tumor progression marker in Oral Cancer in North Indian Population". Mrs. Divya Prasad, 2021
4. Assessment of micro and macronutrient levels among school-going adolescents in Lucknow Metropolitan Community and their relation with dietary behavior and patterns". Mrs. Poonam Tiwari, 2021
5. Association of Heavy Metals exposure in relation to serum insulin levels, insulin sensitivity and diabetes mellitus: A case control study. Ms. Shefali Singh, 2021
6. Role of Circulatory Long-Noncoding RNAs and Cytokines in the Pathogenesis of Ischemic Stroke. Ms. Akanksha Gupta, 2021
7. Genome-wide screening of methylation sites and high-risk loci in gallbladder carcinoma Devbrat Singh, registered in Jan 2024.
8. Isolation and Evaluation of Bacteriophage against Multi Drug Resistance Pseudomonas aeruginosa. Nidhi Rai, registered in Jan 2024.
9. Gut Microbiota, Vitamin K2, Osteocalcin and Its Association with Insulin Indices in Diabetes: A Case–Control Interactome Study (Ms. Tanu Pandey, registered in 2025 at Dr. RMLIMS, Lucknow)
10. Characterization of gut microbiota and short chain fatty acids alterations in non-alcoholic fatty liver disease (Ms. Mitali, registered in 2025 at Dr. RMLIMS, Lucknow)
11. Ms. Raghvi Tondon (registered in 2024 at Amity University)

DM Thesis

1. **DM (Neurology)** thesis entitled 'Estimation of serum biomarkers & their correlation with severity & outcome in Patients with Acute Ischemic Stroke'. *Dr. Deepak, RMLIMS 2017.*
2. **DM (Cardiology)** thesis entitled 'Fibrinogen-to-Albumin Ratio as a Predictor of Severity of Coronary Artery Disease and Short Term Prognosis in Patients Undergoing Invasive Coronary Angiography'. *Dr. Qutubuddin, 2024*
3. **DM (Nephrology)** thesis entitled 'Association between Mineral and Bone Disorder in Patients with Acute Kidney Injury and Major Adverse Kidney Events'. *Dr. Pratyush Kumar*
4. **DM (Nephrology)** thesis entitled 'The Role of Heavy Metals and Self Reported Heat Stress in Chronic Kidney Disease of Unknown Etiology in Northern India-A Case Control Study'. *Dr. Ahmad Shakeb*

MD (Pathology) Thesis

1. Multimodal diagnostic approach to brain abscess. *Dr. Ritu Verma, 2002.*
2. Immunocytochemical and molecular detection of Mycobacterium tuberculosis complex in cytological and histological samples. *Dr. Megha Goel, 2003.*
3. Immunohistochemical characterization of lymphatic response in oral squamous cell carcinoma, *Dr. Nidhi Anand, 2010.*
4. MGMT Gene Hypermethylation and IDH1 Expression in Glioblastoma Multiforme (GBM) and Astrocytoma. *Dr. Renu Varshney 2015*
5. To Validate the Utility of Serum and Urinary Free Light Chain as Noninvasive Biomarkers of Activity in Lupus Nephritis. *Dr. Lakshita Singh, KGMU, 2015*
6. Evaluation of Changes In Cell Free Tumor DNA Levels In Locally Advanced Head And Neck Cancer Patients Undergoing Radiotherapy. *Dr. Tripti Verma, 2016*
7. Factor VIII Inhibitor in Hemophilia A: Evaluation of IgG4 ELISA as a Diagnostic Test. *Dr. Kahkashan Riaz, 2017.*
8. Evaluation of Diagnostic Efficacy of Novel Red Blood cell Parameters as Potential Screening Test for Detecting Latent Iron Deficiency in Blood Donors. *Dr. Abhishek Shukla 2023*
9. Long Non-Coding RNA in Chronic Myeloid Leukemia: Correlation with Quantitative BCR-ABL and Clinicopathological Features: A Pilot Study. *Dr. Anupam*
10. Molecular mutations in heavy metal associated gall bladder adenocarcinoma. *Dr. Shivansh Dixit.*

MD (Anesthesiology) Thesis

1. A study of Vitamin D level in critically ill patients and effect on supplementation on clinical outcome. *Dr. Shubhranshu Shekhar Padhy, 2015.*
2. Changes in Biomarker of Hepatic and Renal Function after General Anesthesia with Inhalation Agents in Oncology Patients on Various Treatment Modalities: A Clinical Study. *Dr. Prakrati Sachan, 2015.*
3. Comparison of Diagnostic & Prognostic Value Among Presepsin (sCD-14ST), Procalcitonin (PCT) and Interleukin-6 (IL-6) in the Management of Sepsis: A Comparative Prospective Study. *Dr. Yogendra Pratap Maurya, 2017.*
4. A Prospective longitudinal study comparing subjective and objective parameters in Post Operative Pain. *Dr. Mansi Baranwal, 2023.*

MD (Radiology) Thesis

1. Clinical and Radiological Characteristics of Spondyloarthropathy. *Dr. Tanu Mishra*, RMLIMS 2018.

MD Pediatrics Thesis

1. Malnutrition and its Associated Risk Factors Among under 6 months Low Birth Infants- A Longitudinal Study. *Dr. Anshika Anand*

MD (Obstetrics and Gynecology) Thesis

1. Comparing Diagnostic Accuracy of HE4, CA125, Risk of Ovarian Malignancy Algorithm and Risk of Malignancy Index for Cancer Prediction in Women with Adnexal Masses. *Dr. Arshita*

MD(Pharmacology) Thesis

1. A prospective observational study to evaluate the efficacy and safety sodium glucose cotransporter-2 inhibitors in patients of type 2 diabetes mellitus. *Dr. Anurag Shukla*

M.D.S. (Dental Sciences) Thesis

1. A comparative evaluation of different mouth washes on salivary bacterial counts. *Dr. Vinay Kumar Srivastava* (Pedodontics), 2001.
2. Decontamination of Gutta Percha cones with different chemical agents-A comparative study. *Dr. Vivek Rana* (Pedodontics), 2002.
3. Smoking and periodontal diseases. *Dr. Nimit Kumar Garg* (Periodontics), 2002.
4. Role of ornidazole in periodontics. *Dr. Bharat Bhushan* (Periodontics), 2002.
5. Comparative evaluation of efficacy of different root canal irrigants (A microbiological study). *Dr. Monika Rathore* (Pedodontics), 2002.
6. A comparative evaluation of antimicrobial effectiveness of different preparations of calcium hydroxide-An in vitro study. *Dr. Anshul* (Pedodontics), 2003.
7. To evaluate the effect of local therapy on the levels of free radicals and antioxidants in saliva of smokers and diabetics with chronic periodontal disease. *Dr. Harmeeta* (Periodontics), 2009.
8. Effect of Systemically Administered Ornidazole and Metronidazole with or without Scaling and Root Planning: A Clinico-Microbiological Study. *Dr. Manisha Pathak*, 2014
9. Evaluation of Interleukin-10 as a Predictor of Glycemic Alteration in Diabetes and Peridontitis. *Dr. SK Aziz Ikbal* (2020)
10. To assess and compare Stress Level in Pediatric Patients using Physiological, Psychological and Immune Responses ungoing Non-Invasive Dental Procedure. *Dr. Priestla Yamnam* (2021)
11. Comparison of Craniofacial Morphology Characteristics Along with Dental Caries Status and Salivary Properties of Operated Cleft Lip and Palate Patients with Noncleft Patients. *Dr. Lipsikha Talukedar* (2021).
12. Comparative Evaluation of Salivary Interleukin-6 in Diabetic and Non-Diabetic Patients with Chronic Peridontitis. *Dr. Tasneem Fatima* (2021).
13. To evaluate and Compare the Dental caries Status and Salivary Properties of Children with/without Molar Incisor Hypomineralization of 8-15 Years age in Lucknow: A Cross-Sectional Study. *Dr. Aanchal Pandey* (2022)
14. Comparative Evaluation of Plasma Level of Interleukin-17 (IL-17) in Chronic Periodontitis Patients with and without Diabetes mellitus after Non-surgical Periodontal Therapy. *Dr. Swapnil Agarwal* (2023)

15. Role of Interleukin-17 in Chronic Periodontitis and Controlled Type-2 Diabetes Mellitus: A Clinical Study. *Dr. Akanksha Singh* (2024)
16. Comparative evaluation of interleukin-33 levels in chronic periodontitis patients following non-surgical periodontal therapy. *Dr Aayushi Asthana* (2026)

M.Phil. Thesis

1. Role of T regulatory cell in Oral Cancer. *Shobhna Vaish*, 2012

Professional achievements:

Contributions in last 30 years

- Standardized **Polymerase Chain Reaction (PCR)** for diagnosis of infectious diseases during my postdoctoral fellowship from ICMR first time in the CSMMU Lucknow.
- Developed a new antigen detection Dot- ELISA for tubercular lymphadenitis.
- Established **Routine Chemical Pathology Lab** in Trauma Centre, CSMMU Lucknow at time of inauguration and worked there for more than five years alone (one year without salary) for the benefit of poor patients.
- DST Women Scientist fellowship SR/WOS-A/LS-76/2009 as PI (R.18,48,000) for three years.
- Headed the Department of Biochemistry at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow and actively involved in teaching and research at the institute along with administrative responsibilities.

Research Highlights

- Development of Immuno-peroxidase Assay using whole parasite as antigen
- Used whole parasite as an antigen in the form of fixed smears on glass slides for rapid serodiagnosis of visceral leishmaniasis; work is published in Indian Journal of Experimental Biology (1994).
- Development and standardization of DNA extraction protocol for Mycobacterium tuberculosis: Compared various protocols of Mycobacterial DNA extraction published with our own protocol which is most sensitive (Qualitatively as well as quantitatively) than others: work is published in Molecular Biology Today (2002).
- Research on Development of novel technique for early diagnosis of extra pulmonary tuberculosis: Standardized & started Polymerase Chain Reaction (PCR) technique in our research laboratory for the first time for early diagnosis of extra pulmonary tuberculosis: Research proposal was financially supported by Indian Council of Medical Research (1999).
- Development and standardization of a potentially simple and economic “end of pipe” approach to diagnose infectious disease at Field level:
- The most sensitive antigen of Leishmania donovani was characterized for diagnosis of Kala-azar and was compared with various serological techniques like ELISA for rapid diagnosis; work is published in Biochemistry and Molecular Biology International in the year 1995; Indian Journal of Experimental Biology (1994 & 1996).
- Application of enzyme amplified detection of mycobacterial DNA in diagnosis of pulmonary as well as extra pulmonary tuberculosis in India; work is published in Indian Journal of Medical Research in the year 2003

- Development of a new antigen detection Dot- ELISA for tubercular lymphadenitis in fine needle aspirates; published in Journal of Microbiological Methods in 2002
- PCR technique used for detection of mycobacterial DNA in archival fine needle aspiration smear scraping samples from suspected cases of tuberculous lymphadenitis; work is published in Acta Cytological (2006).
- Research on the improvement on Protective effects of plant extracts as an adjuvant therapy for the control of infectious diseases: Studied the protective effects of green tea extracts against the erythrocytic oxidative stress injury during Mycobacterium tuberculosis infection in mice.” Molecular and Cellular Biochemistry (2002).
- Selective and Preferential role of oxidative stress in Dental Hygiene: Guided MDS thesis as Co-supervisor of Dr Nimit Garg: work is published in Journal of Periodontal Research (2006).
- New born screening for congenital hypothyroidism was done with the aim to determine whether a new-born screening for Congenital Hypothyroidism (CH) is cost-beneficial from a societal perspective or not. Our findings suggest that, Cost benefit of the screening was approximately ten-fold if the neonatal screening program for congenital hypothyroidism is included as a health policy. Screening of neonates has not only economic implications which reduces capital costs, it can also be beneficial in terms of saving affected child from neurodevelopmental outcomes & improvement in quality of life and may be a major public health success in preventing numerous cases of intellectual disability and assuring normal development of thousands of children.

Clinical Work:

- Setup of Biochemistry lab at Dr. Ram Manohar Lohia Institute of Medical Sciences and looking after the entire investigation work done in the Biochemistry and partial work in Immunopathology lab of the Department of Pathology.
- Wide range of biochemical investigations have been added including ADA, Cardiac Markers CK-MB, CK-NAC, Extended Lipid Profile, C3 C4, Osmolality UACR, Arterial Blood Gases in Biochemistry Lab.
- Started 24x7 Emergency Pathology Services since 1st August 2013 in the Institute.
- Work load of Biochemistry/ Emergency Pathology investigations were increased ten-fold during this tenure.
- Current test load is about 2500-3000 tests per day in the lab.
- Specialized investigations like Vitamin D, Vitamin B12, Folic Acid, drug levels (Phenytoin, Valproate, Carbamezapene etc), Troponin-I qualitative and quantitative test, Allergy and autoimmune profile, toxic metal profile, stone analysis, ANA screening, etc. were added.
- Automation and networking of automated analyzers was done with HIS and LIS for smooth functioning, timely and correct report delivery in the lab.
- Internal and External quality control samples are being run on regular basis and “Certificate of Recognition was awarded to Biochemistry and Immunopathology Lab.

Editorial board member/Editor:

- Scientific Report

Reviewer:

- **Journal of Brain Disorders:** Alteration of Hemostatic Coagulative Balance in Bacterial Meningitis: Activation of Coagulation & Inhibition of Fibrinolysis.

- **Disease Markers:** Predictive value of heart-type fatty acid-binding protein for mortality risk in critically ill patients.
- **Frontiers in Neurology:** Rehabilitative effects of Baduanjin in stroke patients: A systematic review and meta-analysis; Effects of Kaiyin Xuanfei Manipulation Treatment on Patients with Dysarthria after Stroke: Study Protocol for a Randomized Controlled Trial.
- **Current Molecular Medicine:** Physicochemical stimulus-responsive systems targeted with antibody derivatives
- **Advances in Medical Sciences:** (Article: The Impact of Permissive Hypercapnia on Patient Outcomes and Intraoperative Cytokine Levels in Laparoscopic Surgery)
- **Scientific Reports**
- **International Journal of Clinical Practice**
- **Health Science Reports**

External Examiner for PhD-viva

1. Protective Effect of Selenium on Hexachlorobenzene Induced Hypoparathyroidism in Female Rats. Bhanu Pratap, The Maharaja Sayajirao University of Baroda, Vadodara, Gujrat.
2. Role of Vitamin-D Receptor Polymorphisms in Susceptibility to Essential Hypertension. Richa Awasthi, Integral University, Lucknow
3. Studies on Biochemical Activity of Natural Products. Ramesh Kumar, University of Allahabad, Prayagraj
4. Studies on the Biochemistry of Body Weight Management. Astha Dwivedi,
5. Antitubercular Drug Induced Liver Injury and its Mitigation by Natural Products. Harvesh Kumar Rana, University of Allahabad, Prayagraj
6. Developing Antifungal Agents and Characterizing Their Mechanism of Action in Opportunistic Pathogenic Yeast, *Candida Albicans*. Radha Krishnan V S, IFTM University, Moradabad.
7. Study of Oxidative Stress in Oral Lesions and Effect of Curcumin and Aloevera in Abrogation of these Lesions. Parul, Amity University, Lucknow.

Speaker/ Paper/Oral/Poster presentation in the scientific programs

(Total-53; International-15, National-38)

International:

1. Presented **two posters** entitled “Amplification of Mycobacterium tuberculosis Complex DNA from Archival Fine Needle Aspiration Smear Scrapings vs. Fresh Fine Needle Aspirates of Tuberculous Lymphadenitis” and “Telomerase h-TERT expression in oral cancer smears” in International Cytology Congress, Edinburgh, Scotland, UK, (16th -20th May 2010).
2. Presented **a poster** entitled “High risk HPV positivity and h-TERT expression in oral cancer” in 26th International Papillomavirus Conference & Clinical and Public Health Workshops, Palais des Congress de Montreal, Canada (July 3-8, 2010).
3. Presented **an oral paper** entitled “Applicability of Nano mechanical Imprints in Oral Cancer Detection: Differentiation from Normal Tissues” NANO-DDS 2011 Conference held at Brooklin, New York USA (29th Aug -2nd September 2011).
4. Presented a poster entitled “CD3-TIL variations in Oral Cancer in relation to stage and grade of the disease” in World Cancer Congress 2012 (UICC), held in Montreal, Canada (27-30th August 2012).

5. Presented a **poster** entitled “Differential Infiltration of CD8+ and CD4+ cells in Oral Cancer and its Association with Clinical Outcome: An Immunohistochemical Study” in XXIXth Congress of International Academy of Pathology, 2012 held in Cape Town, South Africa (30th Sept- 5th Oct 2012).
6. Presented a **poster** entitled “OCT-3/4, CD24 & NANOG Expression in Oral Cancer: Effects on Response to Chemo-Radiation in 8th Asia Pacific Conference held in Busan Korea, (September 5-8, 2013).
7. Presented a **poster** entitled “Variation in Chemo-Radiation Response with Stem Cell Marker Expression in Oral Cancer” in 1st SACH Conference at Chittagong Bangladesh (13th-16th November 2013).
8. Presented a **poster** entitled “Stem cell markers as predictors of chemoradiation response in oral cancer” in CPSL AAPIAP Conference held in Colombo Sri Lanka (27-29th August 2014).
9. Presented an **oral paper** entitled “Infiltrating regulatory T lymphocytes in tumor areas in Oral Squamous Cell Carcinoma” in 2nd SACH Conference at Cox’s Bazar Bangladesh (31st October- 1st November 2014).
10. Presented a **poster** entitled “Expression of Gamma Delta T Cell receptor V repertoire in OSCC Patients.” in 3rd SACH Conference at Dhaka Bangladesh (2-4th October 2015).
11. Presented an **oral paper** entitled “Cost-effectiveness Analysis of Congenital Hypothyroidism in Neonates Born in Uttar Pradesh: A Pilot Study” in 4th SACH Conference at Dharan Nepal (16th -18th September 2016).
12. Presented a **poster** entitled “CA19.9 and CA242 Biomarker Expression in Gall Bladder Cancer” in “CAP 2016 The Pathologists Meeting” held in Las Vegas, Nevada on 25-28th September 2016.
13. Presented an **oral paper as Speaker** entitled “Effect of Long Term Valproate and Oxcarbazepine Therapy on Asymmetric Dimethyl Arginine and Homocysteine Levels in Newly Diagnosed Epileptic Children” at 29th Neonatology and Primary Care Congress Held in Paris France (26-27th Nov 2019).
14. Presented a **poster** entitled “Dysregulation of Circular RNAs and Endoplasmic Reticulum Stress Response in Oral Carcinoma” in APFCB 2024 Congress held in Sydney Australia (29th Oct-3rd Nov 2024).
15. Presented a **keynote address** entitled “Endoplasmic Reticulum Stress & Circular RNAs in Oral Squamous Cell Carcinoma Tumorigenesis: Insight in the Molecular Mechanisms” at “International Cancer Research Conference” (Cancer Research 2025: Hybrid Event), at Singapore (March 24th -26th 2025).

National

1. Presented a **poster** “Studies on in vitro glutathione oxidation rate on red cells of normal and diabetic human blood” in Society of Biological Chemists (INDIA) (1989).
2. Presented a **poster** entitled “Evaluation of indirect immunoperoxidase assays of rapid sero diagnosis of kala- azar.” in XIX Annual Conference of Indian Immunology Society, Bangalore (Jan 8-10, 1993).
3. Presented a **poster** entitled “Comparative evaluation of serological tests for diagnosis of Visceral Leishmaniasis” in XIX Annual Conference of Indian Immunology Society, Bangalore (Jan 8-10, 1993).
4. Presented a **poster** entitled “Immunoblotting as a valuable tool for serodiagnosis of visceral leishmaniasis in India” in 43rd National Conference, Indian Association of Pathologists and Microbiologists Lucknow (Nov. 22-27, 1994).

5. Presented a **poster** entitled “Effect of Leishmania donovani on PMNLS function” in 44th National Conference, Indian Association of Pathologists and Microbiologists Patna, (Nov. 19-24, 1995).
6. Presented **two posters** entitled “Effect of Leishmania donovani and its antigens on superoxide anion generation by mice polymorphs in vitro” and “Indirect immuno-peroxidase Test for serodiagnosis of visceral Leishmaniasis: Sensitivity and specificity of two morphological forms of L. donovani” in XXII National Congress Indian Association of Medical Microbiologists KMC, Manipal (6-9 November, 1998).
7. Presented **two posters** entitled “Immunodiagnosis of kala-azar by dot-ELISA” and “Diagnostic significance of antigen specific circulating immune complexes in kala azar” in XXVIII Annual Meeting of the Indian Immunology Society and Symposium on Immune Effector Mechanism, All India Institute of Medical Sciences, New Delhi (4-6 Oct. 2001).
8. Presented a poster in 6th Asia pacific congress of International Academy of Pathology at Kochi, Kerala, India (20th-23th Aug, 2009).
9. Annual Conference of the UP Chapter of IAPM UP- Pathcon organized by ERA Medical College, Lucknow (24-25 October, 2009).
10. Presented **two posters** entitled “Role of oxidative stress in pathogenesis of pulmonary tuberculosis and “Protective effects of green tea extracts against the erythrocytic oxidative stress injury during Mycobacterium tuberculosis infection in mice” in....“International update on Breast Cancer”, Department of Surgical oncology, CSM Medical University, Lucknow (25th Sept 2009).
11. Presented a **poster** “Development of whole parasite antigen fixed Dot-ELISA for serodiagnosis of amoebiasis” in Conference on Amoebiasis and the Biology of *Entamoeba histolytica*, Jaypee Hotel Agra, (February 11-14 2002).
12. Presented a **poster** “DNA repair gene polymorphisms and Lung cancer”. in 28th Annual Convention of Indian Association of Cancer Research and International Symposium on Emerging Challenges and Approaches in Cancer Biology, (Feb 21-24th 2009).
13. Presented a **poster** “Proton Magnetic Resonance Spectroscopy for Evaluation of Malignancy at Resected Margins in Oral Cancer” in 6th Asia Pacific IAP Congress, Kochi India, (August 20-23rd 2009).
14. Presented a **poster** “Is nm23-h1 related to metastasis in lung adenocarcinoma? “Scanning electron microscopic changes in the gingival tissue of pan-masala chewers” UP Chapter of Indian Association of Pathologists and Microbiologists, Oct.; Era’s Lucknow Medical College, Lucknow, (24-26th 2009).
15. Presented a **poster** entitled “Prognostic Significance of Tumor Infiltrating T-cell subsets in Oral Squamous Cell Carcinoma” in 59th Annual Conference of Indian Association of Pathologists and Microbiologists at Hyderabad. (9th-12th Dec 2010).
16. Presented a **poster** entitled “Is cyclin-D1 a predictor of chemoradiation response in oral squamous cell carcinoma?” in 59th Annual Conference of Indian Association of Pathologists and Microbiologists at Hyderabad (9th-12th Dec 2010).
17. International Symposium on Molecular Pathology, Department of Pathology, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, (February 14, 2011).
18. “National CME in Cytology & Hands on Workshop on Immunohistochemistry” at Era’s Lucknow Medical College, Lucknow (30th & 31st July 2011).
19. International Update in Pathology held at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow India (31st Jan 2012).
20. Meeting of the Lucknow Pathologists Group organized (5th February 2012).
21. CME on Thyroid Cytology, held at Era’s Lucknow Medical College and Hospital, Lucknow (14th Feb 2012).

22. Lecture at Defining role of women scientist and teacher in promotion and application of science and technology, Allahabad (15 September 2012).
23. Presented a poster in 61st Annual Conference of IAPM (14th -16th December 2012).
24. APCON 2012, 61st Annual Conference of IAPM, Jamnagar, Gujrat (9-12 December 2012).
25. International Symposium on “Current Trends in Genetic and Genomic Medicine” at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (31st January 2013).
26. “Update on Screening of Breast and Cervical Cancer” at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (4-5th Feb 2013).
27. National Conference on Advances in Cancer Research and Symposium on Cervical Cancer, ‘ONCO-2013’ on at Era's Lucknow Medical College (12th February, 2013).
28. “Update on Tuberculosis” at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (18th March 2013).
29. Lecture on “Cancer cell and lab diagnosis of cancer in “Training Course on Radiation Safety For Radiation Therapy Technologist” at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (15th- 20th April 2013).
30. Presentation on “Does CD24 and Oct 3/4 Expression in Human Glioblastoma predict survival” at the 8th Asia Pacific Conference”, Bussan South Korea (5th -8th September 2013).
31. Invited Lecture on “HPV and Oral Cancer”, at the 1st SACH conference of the SAARC countries on at Chittagong, Bangladesh (14-15th November).
32. Presented a poster entitled “Regulatory T-Cell Deficits Mediating the Immune Dysregulation in Primary Oral Squamous Cell Carcinoma” in “3rd International Conference on Primary Immune Deficiency Diseases” held in Chennai, India, (21-23rd February 2015).
33. Presented a poster entitled “Natural Killer Cells in Oral Cancer Thrive: Correlating the Significance” in “National Conference on Bioinformatics Panorama in Agriculture and Health” held at Sam Higginbottom Institute of Agriculture and Sciences, Allahabad, (5-6th October 2015).
34. Presented an oral paper entitled “PCR Amplification of M. Leprae Specific DNA for Early Detection of Hansen’s Neuritis” in “64th Annual Conference of Indian Association of Pathologists & Microbiologists” held at Kochi, India (4-6th December 2015).
35. Presented a poster entitled “Gene Expression Profile of Stem Cells in Glioblastoma Multiforme and its Association with Response to Therapy and Survival” in “1st Annual Conference of Neuropathology Society of India” held at Hyderabad, India (19-20th December 2015).
36. Presented a poster entitled “A correlation between fetuin-A and Insulin resistance in obese and non-obese subjects with and without type II diabetes mellitus” in North Zone ACBICON (April 22nd -23rd 2022).
37. Presented an oral paper entitled “Transcriptomic landscape of type 2 diabetes mellitus: a microarray analysis of gene expression and pathway enrichment” at Golden Jubilee Conference of the Association of Clinical Biochemists of India (ACBICON) at Chandigarh (December 5th-7th 2024).
38. Presented an oral paper entitled “Mosquito Repellents Exacerbate Asthma Severity via Th2 Cytokine Imbalance in Children with FcεR1β Variant Genotypes” at XIIIth Annual International Conference of Indian Academy of Biomedical Sciences (IABSCON) at AIIMS Bhopal (Feb 11-13th 2025).

Scientific programs organized

1. ‘Scientific Secretary’ Pre-Conference Workshop of AMUCON-2025 (18 Dec, 2025).
2. ‘Program Co-ordinator’, Conference Prelude AMUCON-2025 (November 29, 2025).
3. **Organizing Committee Member** - AMUCON 2025 (18-20 Dec 2025).

4. **Scientific Secretary** of ‘5th Pre-Conference CME of ACCLMPCON-2025’ under the aegis of UP Chapter, ACCLMP organized by Department of Biochemistry, Dr RMLIMS, Lucknow (6th October 2024).
5. **Judge** in poster session on Research Showcase-2025 at SGPGI, Lucknow.
6. A CME was organized by Backman Coulter Diagnostics (5th May 2025)
7. Seminar on **Internal Quality Control and Analytical Errors in Clinical Laboratory**.
8. Organized a special lecture on External Quality Assurance Scheme.
9. Organized lecture entitled HbA1c Analysis by Sebia Capillary Electrophoresis on Capillary 2 Flex Piercing.
10. Organized a CME on two very relevant topics of clinical diagnostics were discussed (i) Lipid profile-To extend or not to extend (ii) Serum Bile Acid levels in Pregnancy.
11. Organized CME entitled Assessment of lipemia/turbidity, icterus and hemolysis (LIH) in human serum and plasma on Beckman Coulter AU.
12. Two training programme from Beckman Coulter, UK for technical staff, residents and teaching faculty- One for programming and trouble shooting in fully automated biochemistry analyzer. Other for quality assurance in Clinical Biochemistry Lab.
13. Organized a CME on ‘**Advancing Acute Myocardial Infarction Detection with High Sensitive Troponin-I**’ (11th December 2021).
14. ‘**Hands on Workshop on Immunocytochemistry**’ in CYTO-CME at Era’s Lucknow Medical College & Hospital, Lucknow (3rd October 2010).
15. ‘**Hands on Workshop on PCR Techniques**’ in UP Chapter of IAPM Annual Conference & Workshop UPPATHCON 2009 at Era’s Lucknow Medical College & Hospital, Lucknow.

Hands-on workshops/training

1. Workshop on “**HPV Detection in Liquid Based Cytology**” during MID Year Teaching Program of IAP-ID at Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (July 2013).
2. Wet Workshop on “**FISH Techniques**” during Annual Conference of UP Chapter of Indian Association of Pathologists & Microbiologists at DR. Ram Manohar Lohia Institute of Medical Sciences, Lucknow (October 2014).
3. Clinical Investigation support provided to Department of Nephrology on “World Kidney Day” every year.
4. “Hands on training programme on anti-mycobacterial drug susceptibility testing”, KGMC ICE and Microbiology Department, KGMU, Lucknow (19-24th July 2004).
5. Nuclear Science Centre, New Delhi, “User **Workshop** on Radiation Biology”, 2002
6. Pre-Congress **Workshop** on “Hemogram Quality Control” in 48th Annual Conference of Indian Society of Hematology & Transfusion Medicine (ISHTM-2007), at CSM Medical College, Lucknow, (November 14th 2007).
7. National Workshop on “Torture & Rehabilitation of Torture Victims” organized by Society for Social Research, Art & Culture IMA-CGP, Lucknow Chapter, (March 15-16th 2008).
8. CME & Workshop in Pathology, Department of Pathology CSM Medical University; Feb 2008.
9. “ICMR-FERCAP Human Subject Protection Course” Indian Council of Medical research and SGPGIMS Lucknow, (6-8th August 2010).
10. “Research Methodology Lecture Series and Paper Writing Workshop” Era’s Lucknow Medical College and Hospital, Lucknow, (September 2010-March 2011).
11. Workshop on “Image Analysis and Morphometry in Pathology” held at All India Institute of Medical Sciences, New Delhi, (21-22nd May 2011).

12. Attended a Workshop entitled “Hands on Course in Biostatistics” organized by Research Cell Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow on 1st -2nd November 2012.
13. “Special Course on Leukemia/Lymphoma Immuno-phenotyping” at BD Biosciences Training Centre Gurgaon, India, (5th -8th September 2011).
14. Participated in a workshop on “Empowerment of Women Using Environmentally Sustainable Technologies” organized by Allahabad Chapter of National Academy of Sciences, India (NASI), (5-6th June 2013).
15. Attended Training Programme on “Medical Laboratories Quality Management System and Internal Audit” as per IS/ISO 15189:2012 at RML Research Foundation Lucknow from 20-23rd March 2014
16. Attended Awareness workshop on “International Classification of Functioning, Disability & Health (ICF)” organized by Central Bureau of Health Intelligence, Ministry of Health & Family Welfare, Government of India on 17th January 2015 at Dr Ram Manohar Lohia Institute of Medical Sciences Lucknow.
17. Attended **Awareness workshop** on “International Classification of Diseases (ICD-10)” organized by Central Bureau of Health Intelligence, Ministry of Health & Family Welfare, Government of India on 11th March 2015 at Dr Ram Manohar Lohia Institute of Medical Sciences Lucknow.
18. CME on “**Food Intolerance**” on 22nd September **2018**, speaker Mr. Kandarp Vyas.

Scientific programs attended

1. XXI Annual Conference of Indian Immunology Society, Chandigarh, Sept 14-16, 1994
2. “27th Annual Convention of Indian association of Cancer research” Gujrat Cancer and Research Institute (6-9th Feb 2008).
3. Participation in ‘Symposium on writing for Publication’ conducted by Department of Surgical Oncology at CSM Medical University, Lucknow (on 24th Sep 2009).
4. “International Update on Breast Cancer” Department of Surgical Oncology, CSM Medical University Lucknow (25th September 2009).
5. UP Chapter of Indian Association of Pathologists and Microbiologists, Era’s Lucknow Medical College, Lucknow (Oct. 24-26th, 2009).
6. Seminar on “An Introduction to the Role of Bioinformatics in Translational Medicine” Research cell CSM Medical University Lucknow, (22-23rd July 2010).
7. 4th International Conference INDIAS: 2010-Allahabad, India (September 19th-21st 2010).
8. “INDIA –JAPAN Seminar: Nanomaterials for Diagnostics and Therapeutics”. Maharshi Dayanand University, Rohtak India, (30th Oct 2010).
9. Annual Conference 2010 of the International Academy of Pathology – Indian Division (IAP-ID), (9th December 2010).
10. 59th Annual Conference of Indian Association of Pathologists and Microbiologists (APCON 2010) at Hyderabad (9th-12th Dec 2010).
11. “National CME in Cytology & Hands-on-Workshop on Immunocytochemistry” Era’s Lucknow Medical College and Hospital, Lucknow; 30-31st July 2011.
12. “National CME: Short Course on Thyroid Cytology & Advances in Cytology” at Era’s Lucknow Medical College and Hospital, Lucknow; held on 7-8th Feb 2012
13. “International Academy of Pathology-Indian Division (IAP-ID)” as Delegate for Scientific Session on 13th December 2012.
14. “Update on Screening of Breast & Cervical Cancer” organized by Department of Pathology; Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow on 4th February 2013.

15. "Public Awareness Program on Breast & Cervical Cancer Screening" organized by Department of Pathology; Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow on 5th February 2013.
16. "Update on Tuberculosis" organized by Department of Microbiology; Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow on 18th March 2013.
17. "Mid-Year Teaching program of International Academy of Pathology-Indian Division (IAP-ID)" on "Liquid Based Cytology of Gynaec & Non Gynaec Applications" organized by Department of Pathology, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow on 7th July 2013
18. "UPPATHCON 2013- XXI Annual Conference of Indian Association of Pathologists (IAPM-UP Chapter)" organized by Muzaffarnagar Medical College, Muzhaffarnagar, on 19-20th October 2013.
19. "Symposium on Breast Pathology" as part of SGPGI Breast Course organized by Department of Endocrine Surgery, SGPGIMS, Lucknow, on 8th February 2014.
20. "Symposium on Vector Borne Diseases" organized by Department of Microbiology, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, on 5th April 2014.
21. "UPPATHCON 2014" organized by Department of Pathology, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, on 11-13th October 2014.
22. "63rd Annual Conference of IAPM APCON 2014" organized by Armed Forces Medical College Pune from 4-7th December 2014.
23. "International Academy of Pathology-Indian Division-(IAP-ID) Annual Conference" at Kochi on 3rd December 2015.
24. "Centre for Advanced Research and Excellence (CARE) in kidney diseases- Biomarkers & newer therapeutics" in the Department of Molecular Medicine & Biotechnology, SGPGI, Lucknow 2023.

Health education/Awareness and Community Participation

1. Cervical cancer and HPV vaccination awareness program and health check up on 4th august 2023 by the institute and Hon'ble Governor of Uttar Pradesh as Chief Guest of the program.
2. Facilitated the health Camp at CHC, Papnamau, Juggaur, Block, Chinhath on 1st August 2024 approved with Community medicine department.
3. Facilitated Health Camp at CHC, Uchgaon Gomti nagar with department of community medicine.

Date: 19/02/2026
Place: LUCKNOW

(VANDANA TIWARI)