

Dr Purvi Purohit

Position	Institute/ University
Professor (Full)	July 2023 till Date
Additional Professor	July 2019 – 30 June 2023, Dept of Biochemistry, AIIMS
	Jodhpur
Associate Professor	July 2016 – June 2019, Dept of Biochemistry, AIIMS Jodhpur
Assistant Professor	March 2013 – June 2016, Dept of Biochemistry, AIIMS
	Jodhpur
Academic qualifications	
B. Sc	Jai Narain Vyas University, Jodhpur
M.Sc (medical) Biochemistry	Dr S. N. Medical College, Jodhpur (Under Rajasthan
	University, Jaipur)
Ph D (medical) Biochemistry	Dr S. N. Medical College, Jodhpur (Under Rajasthan
	University of Health Sciences, Jaipur)
H-Index	23

Expert Positions:

- Fellow of Royal Society of Biology (FRSB)
- Fellow Academy of Diagnostic Laboratory Medicine (FADLM)
- Fellow of the Association of Clinical Scientists (FACSc)
- Fellowship in Meta-analysis, Foggia University, Italy (2019)
- Union Public Service Commission Subject expert
- Subject-expert Standing Selection Committee, AIIMS Rajkot, AIIMS Guwahati
- ICMR-PRC Member, NCD Discovery Division
- Reviewer SERB, India
- Reviewer Imperial College of London
- Corresponding member IFCC-C-CMBC
- Life Member of the Association of Clinical Biochemists of India.(ACBI)
- Life Member Research Society for Study of Diabetes in India (RSSDI)
- Member European Association of Cancer research (EACR)
- Life Member Immunologic Society of India
- Life Member Indian Association of Biomedical Scientists (IABS)
- Life Member of Nutrition Society of India
- Member, Human Genome Organisation
- Member, American Society of Cell Biology
- Review Topic Editor in Frontiers Oncology Breast Cancer
- Editorial Board Scientific Reports
- Trained in basic molecular biology techniques (Sewagram, Wardha) (February 2015)
- Certified NABL Auditor (August 2022)
- Trained in animal cell culture (NIT Rourkela) (November 2017)
- Certificate course in Health Research Fundamentals by NPTEL Online Certification (October 2017)
- Master course in Hospital Quality System Design & Implementation (2020)

- Certificate course in Next Gen Sequencing Data analysis (RNAseq) 2025 CBNIRT.
- Certificate Course in Precision Medicine 2025

Research Interests

- Cancer Biology- Mechanism of carcinogenesis, the role of glycogenes, gut microbiome in carcinogenesis, Drug resistance, stemness of breast cancer; Immunologic tolerance in Breast cancer tumours, HNSCC & liquid biopsy.
- Environmental toxicology and its metabolic impact
- Clinical and molecular research in Diabetes mellitus, Thyroid Disorders, Metabolic syndrome cardiovascular diseases and Cancer.
- Molecular Psychiatry with focus on Epigenetic regulation of Major Depressive disorder and Substance abuse
- Regulatory roles of microRNA in a disease process
- Nutritional status in Non-communicable diseases
- Thenatochemistry

Publications:

- 1. Karthikeyan, M., Mohan, V., **Purohit, P**. et al. Cholesteatoma aggressiveness in paediatric vs. adult patients: a comparative analysis of molecular markers with MERI and EAONO/JS staging. Eur Arch Otorhinolaryngol (2025). https://doi.org/10.1007/s00405-025-09322-y.
- 2. Yadav B, Gupta N, Kumar P, Sasidharan R, **Purohit P**, Singh K, Sharma P, Singh A. Cutoff levels of serum 25-OH-D for defining vitamin D deficiency in early infancy. Pediatrics & Neonatology; Jan 2025; DOI: 10.1016/j.pedneo.2024.06.017.
- 3. Dyvik, S., Toteja, N., Mittal, A., **Purohit P**. *et al*. Diagnostic Accuracy of Furosemide Stress Test and Cystatin-C for Predicting Acute Kidney Injury Progression in Children: A Prospective Cohort Study. *Indian J Pediatr* (2025). https://doi.org/10.1007/s12098-024-05401-w
- 4. Bharti Yadav, Neeraj Gupta, Pragya Kumar, Rohit Sasidharan, **Purvi Purohit**, Kuldeep Singh, Praveen Sharma, Arun Singh, Cutoff levels of serum 25-OH-D for defining vitamin D deficiency in early infancy, Pediatrics & Neonatology:2025. [IF-2.3]
- 5. Shekhawat JK, Sharma J, Choudhury B, Chugh A, **Purohit P**, Sharma P, Banerjee M. Aberrant DNA methylation of EDNRB, MGMT and TIMP3 gene promoters in saliva of head and neck carcinoma patients as a diagnostic tool. Molecular Biology Reports. 2025 Dec;52(1):1-9.
- 6. M K, Mohan V, **Purohit P**, Sharma V, Soni K, Choudhury B, Banerjee M, Elhence P, Goyal A. Unveiling the Aggressiveness of Cholesteatoma: Associating MERI with miRNA-21 & IL-6 Expression. Laryngoscope. 2025 Jan;135(1):366-372. doi: 10.1002/lary.31737. Epub 2024 Oct 10. PMID: 39390643.
- 7. V Mohan, SK Patro, **P Purohit**, V Sharma, K Soni, B Choudhury, A Goyal. Pioneering Clinical Investigation: Beta Defensin Expression in Patients of Squamous Cell Carcinoma of Oral Cavity as a Forward-Looking Validation for Molecular Treatment. Indian Journal of Otolaryngology and Head & Neck Surgery, 1-6.

- 8. JK Shekhawat, J Sharma, B Choudhury, **P Purohit**, P Sharma, M Banerjee. TET3 downregulation and low 5-hydroxymethylcytosine are epigenetic signatures of head and neck carcinoma. Molecular Biology Reports 51 (1), 877.
- 9. R Debbarma, M Gothwal, P Singh, G Yadav, **P Purohit**, NK Ghuman, et al. The Spectrum of Thyroid Dysfunction During Pregnancy and Fetomaternal Outcome, A Study from the Premier Institute of Western India. Indian Journal of Community Medicine 49 (5), 734-738.
- 10. Sharma V, Khokhar M, Panigrahi P, Gadwal A, Setia P, **Purohit P**. Advancements, Challenges, and clinical implications of integration of metabolomics technologies in diabetic nephropathy. Clin Chim Acta. 2024 Jul 15;561:119842. doi: 10.1016/j.cca.2024.119842. Epub 2024 Jul 3. PMID: 38969086.
- 11. Gadwal A, Panigrahi P, Khokhar M, Sharma M, Setia P, Vishnoi JR, Elhence P, **Purohit P**. A critical appraisal of the role of metabolomics in breast cancer research and diagnostics, Clinica Chimica Acta, 561, 2024, 119836, https://doi.org/10.1016/j.cca.2024.
- 12. Gadwal A, **Purohit P**, Khokhar M, Vishnoi JR, Pareek P, Choudhary R, Elhence P, Banerjee M, Sharma P. GALNT14 in association with GDF-15 promotes stemness and drug resistance through β-catenin signalling pathway in breast cancer. Mol Biol Rep. 2024 May 25;51(1):691. doi: 10.1007/s11033-024-09645-9. PMID: 38796671. (IF-2.3)
- 13. Gadwal A, **Purohit P**, Khokhar M, Vishnoi JR, Pareek P, Choudhary R, Elhence P, Banerjee M, Sharma P. GALNT6, GALNT14, and Gal-3 in association with GDF-15 promotes drug resistance and stemness of breast cancer *via* β-catenin axis. Growth Factors. 2024 Jun 18:1-17. doi: 10.1080/08977194.2024.2368907. Epub ahead of print. PMID: 38889447. (IF-2.9)
- 14. Khokhar M, **Purohit P**. The emerging role of T helper 9 (Th9) cells in immunopathophysiology: A comprehensive review of their effects and responsiveness in various disease states. Int Rev Immunol. 2024 Jun 12:1-20. doi: 10.1080/08830185.2024.2364586. Epub ahead of print. PMID: 38864109. (IF- 5)
- 15. Kumar, P.K., Japa, P., Tomo, S. **Purohit P**et al. Exploring Micronutrient Dynamics in COVID-19 Severity and Mortality: Unraveling the Roles of Vitamin D, Calcium, Phosphorus, Magnesium and ALP. Ind J Clin Biochem (2024). https://doi.org/10.1007/s12291-024-01225-9. (IF 2.2)
- 16. Bhardwaj P, Mantri N, Joshi NK, Suthar P, Sharma P, **Purohit P** *et al.* Study of anaemia in pregnancy and low birth weight in fluoride endemic area of Western Rajasthan: a cohort study. *F1000Research* 2024, **12**:602(https://doi.org/10.12688/f1000research.134720. 2)
- 17. Thakral S, **Purohit P**, Mishra R, Gupta V, Setia P. The impact of RNA stability and degradation in different tissues to the determination of post-mortem interval: A systematic review. Forensic Sci Int. 2023 Aug;349:111772. doi: 10.1016/j.forsciint.2023.111772. Epub 2023 Jul 1. PMID: 37450949.
- 18. Thakral S, **Purohit P**, Modi A, Mishra R, Sinha A, Setia P. Expression of human cardiac-specific genes: a novel method for post-mortem interval estimation. Arch Med Sadowej Kryminol. 2023;73(1):5-11. English. doi: 10.4467/16891716AMSIK.22.001.18211. PMID: 38186030.

- 19. Thakral S, **Purohit P**, Mishra R, Gupta V, Setia P. The impact of RNA stability and degradation in different tissues to the determination of post-mortem interval: A systematic review. Forensic Science International. Volume 349, August 2023, 111772. (IF 2.2)
- 20. **Purohit**, **P.,** Ateriya, A., & Setia, P. (2023). The COVID-19 Pandemic and its Medicolegal Aspects in the Indian Context. Journal of Indian Academy of Forensic Medicine, 45(3), 291-295. https://doi.org/10.48165/jiafm.2023.45.3.20
- 21. Gadwal A, **Purohit P**, Khokhar M, Vishnoi JR, Pareek P, Choudhary R, et al. In silico analysis of differentially expressed-aberrantly methylated genes in breast cancer for prognostic and therapeutic targets. Clinical and Experimental Medicine. 2023;1–20. (IF: 5.0)
- 22. Sukhija S, **Purohit P**, Pareek P, Garg PK, Vishnoi JR, Elhence PA, et al. Circulating MiRNA-21 Levels in Breast Cancer Patients Before and After Chemotherapy and Its Association with Clinical Improvement. Indian Journal of Clinical Biochemistry. 2023;1–7. (IF:2.2)
- 23. Roy D, **Purohit P**, Khokhar M, Modi A, Shukla RKG, Chaudhary R, et al. Analyzing the Association of Visceral Adipose Tissue Growth Differentiation Factor-15 and MicroRNA in Type 2 Diabetes Mellitus. Journal of Obesity & Metabolic Syndrome. 2023 Mar 30;32(1):64–76. (IF:3.4)
- 24. Khokhar M, **Purohit P,** Tomo S, Agarwal RG, Gadwal A, Bajpai NK, et al. PTEN, MMP2, and NF-κB and Regulating MicroRNA-181 Aggravate Insulin Resistance and Progression of Diabetic Nephropathy: A Case-Control Study. Kidney and Dialysis. 2023 Mar 15;3(1):121–38.
- 25. Khokhar M, **Purohit P**, Gadwal A, Tomo S, Bajpai NK, Shukla R. The Differentially Expressed Genes Responsible for the Development of T Helper 9 Cells From T Helper 2 Cells in Various Disease States: Immuno-Interactomics Study. JMIR Bioinform Biotech. 2023 Feb 23;4:e42421.
- 26. Birdi A, Kumar PK, Nebhinani N, Gupta T, Tomo S, **Purohit P**, et al. Association of circulatory Klotho levels and its expression with miRNA-339 in patients with schizophrenia. Behavioural Brain Research. 2023;445:114359.
- 27. Yadav D, Pvsn KK, Tomo S, Sankanagoudar S, Charan J, **Purohit P**, et al. Association of iron-related biomarkers with severity and mortality in COVID-19 patients. Journal of Trace Elements in Medicine and Biology. 2022;74:127075.
- 28. Birdi A, Tomo S, Yadav D, Sharma P, Nebhinani N, Mitra P, **Purohit P**et al. Role of Klotho Protein in Neuropsychiatric Disorders: A Narrative Review. Indian Journal of Clinical Biochemistry. 2023;38(1):13–21.
- 29. Patwa P, Sharma C, Shekhar S, Singh P, Gupta N, Ghuman NK, **Purohit P** et al. Association of Body Mass Index with Gestational Diabetes Mellitus—an Indian Viewpoint. SN Comprehensive Clinical Medicine. 2022;4(1):180. (IF: 2.7)
- 30. Ukey S, Ramteke A, Choudhury C, **Purohit P**, Vishnoi JR, Chugh A, et al. In-silico, interactomic based screening and identification of differentially expressed miRNAs in oral submucous fibrosis and oral squamous cell carcinoma. Human Gene. 2022;33:201041. (IF: 1.3)
- 31. Tomo S, Banerjee M, Karli S, **Purohit P**, Mitra P, Sharma P, et al. Assessment of DHEAS, cortisol, and DHEAS/cortisol ratio in patients with COVID-19: a pilot study. Hormones. 2022;21(3):515–8. (IF: 3.4)

- 32. Ukey S, Ramteke A, Choudhury C, **Purohit P**, Sharma P. Differential Expression of Zinc-Dependent HDAC Subtypes and their Involvement in Unique Pathways Associated with Carcinogenesis. Asian Pac J Cancer Prev. 2022 Mar 1;23(3):877-883. (IF: 1.64)
- 33. Modi A, **Purohit P**, Roy D, Vishnoi JR, Pareek P, Elhence P, Singh P, Sharma S, Sharma P, Misra S. FOXM1 mediates GDF-15 dependent stemness and intrinsic drug resistance in breast cancer. Mol Biol Rep. 2022 Apr;49(4):2877-2888. (IF: 2.3)
- 34. Khokhar M, Roy D, Tomo S, Gadwal A, Sharma P, **Purohit P.** Novel Molecular Networks and Regulatory MicroRNAs in Type 2 Diabetes Mellitus: Multiomics Integration and Interactomics Study. JMIR Bioinform Biotech. 2022 Feb 23;3(1):e32437. [IF 7.4]
- 35. Thakral S, Setia P, Modi A, Mishra R, Meshram V, Sinha A, **Purohit P**. Serial estimation of gene expression of cardiac troponin I (cTnI) and autophagy gene HMGB1 to determine postmortem interval. Forensic Sci Int Genet. 2022 May;58:102635. (IF: 4.4)
- 36. Chugh A, **Purohit P**, Vishnoi JR, Kaur A, Modi A, Mishra S, et al. Correlation of hsa miR-101-5p and hsa miR-155-3p expression with c-fos in patients of oral submucous fibrosis (OSMF) and oral squamous cell carcinoma (OSCC). Journal of Maxillofacial and Oral Surgery. 2021;1–7. (IF: 1.8)
- 37. Sharma C, **Purohit P**, Khokhar M, Modi A, Singh P, Shekhar S, et al. A clinical and in-silico study exploring the association of CASP-3, NF-kB, miR-187, and miR-146 in pre-eclampsia. Hypertension in Pregnancy. 2021;40(4):288–302. (IF: 2.6)
- 38. Modi A, **Purohit P**, Gadwal A, Roy D, Fernandes S, Vishnoi JR, et al. A Combined Analysis of Serum Growth Differentiation Factor-15 and Cancer Antigen 15-3 Enhances the Diagnostic Efficiency in Breast Cancer. EJIFCC. 2021 Oct;32(3):363–76. (IF: 1.10)
- 39. Modi A, **Purohit P**, Gadwal A, Ukey S, Roy D, Fernandes S, et al. In-Silico Analysis of Differentially Expressed Genes and Their Regulating microRNA Involved in Lymph Node Metastasis in Invasive Breast Carcinoma. Cancer Invest. 2022 Jan;40(1):55–72. (IF:2.4)
- 40. **Purohit P**, Roy D, Dwivedi S, Nebhinani N, Sharma P. Association of miR-155, miR-187 and Inflammatory Cytokines IL-6, IL-10 and TNF-α in Chronic Opium Abusers. Inflammation. 2022 Apr;45(2):554–66. (IF: 4.6)
- 41. Shekhawat J, Gauba K, Gupta S, **Purohit P**, Mitra P, Garg M, et al. Interleukin-6 perpetrator of the COVID-19 cytokine storm. Indian Journal of Clinical Biochemistry. 2021;36(4):440–50. (IF: 2.2)
- 42. Kumar B, Gopalakrishnan M, Garg MK, **Purohit P**, Banerjee M, Sharma P, et al. Endocrine Dysfunction among Patients with COVID-19: A Single-center Experience from a Tertiary Hospital in India. Indian J Endocrinol Metab. 2021;25(1):14–9. (IF: 0.42)
- 43. Khokhar M, Roy D, Bajpai NK, Bohra GK, Yadav D, Sharma P, **Purohit P**. Metformin mediates MicroRNA-21 regulated circulating matrix metalloproteinase-9 in diabetic nephropathy: an in-silico and clinical study. Archives of Physiology and Biochemistry. 2021 Jun 4;1–11. (IF: 3.1)

- 44. Mitra P, Goyal T, Abhilasha, Sharma S, **Purohit P**, et al. Association of blood lead level with neurobehavior and neurotransmitter expressions in Indian children. Toxicol Rep. 2021;8:971–6. (IF: 3.95)
- 45. Shekhawat J, Gauba K, Gupta S, Choudhury B, **Purohit P**, Sharma P, et al. Teneleven translocase: key regulator of the methylation landscape in cancer. J Cancer Res Clin Oncol. 2021 Jul;147(7):1869–79. (IF: 4.3)
- 46. Gadwal A, Roy D, Khokhar M, Modi A, Sharma P, **Purohit P**. CRISPR/Cas-new molecular scissors in diagnostics and therapeutics of COVID-19. Indian Journal of Clinical Biochemistry. 2021;36(4):459–67. (IF: 2.2)
- 47. Mitra P, Goyal T, Sharma S, **Purohit P**, Sharma P. Association of blood lead levels with neurobehavior and BDNF expression in school going children. J Trace Elem Med Biol. 2021 Jul;66:126749. (IF: 3.9)
- 48. Roy D, Tomo S, **Purohit P**, Setia P. Microbiome in Death and Beyond: Current Vistas and Future Trends. Frontiers in Ecology and Evolution [Internet]. 2021 [cited 2023 Jul 3];9. (IF: 4.4)
- 49. Singh P, Mitra P, Goyal T, Sharma S, **Purohit P**, Sharma P. Levels of lead, aluminum, and zinc in occupationally exposed workers of North-Western India. J Basic Clin Physiol Pharmacol. 2021 Mar 12;33(2):191–7. (IF:0.34)
- 50. Tomo S, Kumar KP, Roy D, Sankanagoudar S, **Purohit P**, Yadav D, et al. Complement activation and coagulopathy an ominous duo in COVID19. Expert Rev Hematol. 2021 Feb;14(2):155–73. (IF: 2.8)
- 51. Dharmalingam K, Birdi A, Tomo S, Sreenivasulu K, Charan J, Yadav D, **Purohit P**et al. Trace elements as immunoregulators in SARS-CoV-2 and other viral infections. Indian Journal of Clinical Biochemistry. 2021;1–11. (IF:2.2)
- 52. Roy D, **Purohit P**, Modi A, Khokhar M, Shukla RK, Chaudhary R, et al. Growth differentiation factor-15 as a biomarker of obese pre-diabetes and type 2 diabetes mellitus in Indian subjects: a case-control study. Current Diabetes Reviews. 2022;18(1):53–65. (IF:1.3)
- 53. Khokhar M, **Purohit P***, Roy D, Tomo S, Gadwal A, Modi A, et al. Acute kidney injury in COVID 19–an update on pathophysiology and management modalities. Archives of physiology and biochemistry. 2023;129(3):626–39. (IF:3.3)
- 54. Roy D, Tomo S, Modi A, **Purohit P***, Sharma P. Optimising total RNA quality and quantity by phenol-chloroform extraction method from human visceral adipose tissue: A standardisation study. MethodsX. 2020;7:101113. (IF:0.39)
- 55. Goyal T, Mitra P, Singh P, Ghosh R, Lingeswaran M, Sharma S, **Purohit P** et al. Estimation of lymphocyte subsets and cytokine levels in workers occupationally exposed to cadmium. J Trace Elem Med Biol. 2021 Mar;64:126681. (IF: 3.9)
- 56. Khokhar M, Roy D, **Purohit P**, Goyal M, Setia P. Viricidal treatments for prevention of coronavirus infection. Pathog Glob Health. 2020 Oct;114(7):349–59. (IF:3.7)
- 57. Ghosh R, Kumar PK, Mitra P, **Purohit P**, Nebhinani N, Sharma P. Circulating T helper 17 and IFN-γ positive Th17 cells in Major Depressive Disorder. Behav Brain Res. 2020 Sep 15;394:112811. (IF: 3.3)
- 58. Roy D, Modi A, Khokhar M, Sankanagoudar S, Yadav D, Sharma S, **Purohit P** et al. MicroRNA 21 Emerging Role in Diabetic Complications: A Critical Update. CDR. 2021 Feb;17(2):122–35. (IF: 1.3)

- 59. Khokhar M, Roy D, Modi A, Agarwal R, Yadav D, **Purohit P***, et al. Perspectives on the role of PTEN in diabetic nephropathy: an update. Critical Reviews in Clinical Laboratory Sciences. 2020 Oct 2;57(7):470–83. (IF:7.7)
- 60. Modi A, Dwivedi S, Roy D, Khokhar M, **Purohit P**, Vishnoi J, et al. Growth differentiation factor 15 and its role in carcinogenesis: an update. Growth Factors. 2019 Aug;37(3–4):190–207. (IF:2.3)
- 61. Facciorusso A, Del Prete V, Buccino VR, **Purohit P**, Setia P, Muscatiello N. Diagnostic yield of Franseen and Fork-Tip biopsy needles for endoscopic ultrasound-guided tissue acquisition: a meta-analysis. Endosc Int Open. 2019 Oct;7(10):E1221–30. (IF: 4.2)
- 62. Dwivedi S, **Purohit P**, Sharma P. MicroRNAs and Diseases: Promising Biomarkers for Diagnosis and Therapeutics. Indian J Clin Biochem. 2019 Jul;34(3):243–5. (IF: 2.2)
- 63. Vyas H, **Purohit P**, Dutt N, Sharma P. Microalbuminuria in Chronic Obstructive Pulmonary Disease with and Without Co-morbidities. Indian J Clin Biochem. 2019 Jul;34(3):367–8. (IF: 2.2)
- 64. Dwivedi S, **Purohit P**, Sharma P. Single Cell Omics Approach: A Paradigm Shift in Diagnosis and Therapy of Cancer. Indian J Clin Biochem. 2019 Jan;34(1):1–2. (IF: 2.2)
- 65. Dwivedi S, **Purohit P**, Nebhinani N, Sharma P. Effect of Severity of Opiate Use on Cardiometabolic Profile of Chronic Opiate Dependents of Western Rajasthan. Indian J Clin Biochem. 2019 Jul;34(3):280–7. (IF: 2.2)
- 66. Nebhinani N, Sharma P, Pareek V, Suthar N, Jakhotia S, Gehlot M, **Purohit P** et al. Association of Inflammatory and Liver Markers with Cardiometabolic Risk Factors in Patients with Depression. Indian J Clin Biochem. 2019 Apr;34(2):219–24. (IF: 2.2)
- 67. Dwivedi S, **Purohit P**, Misra R, Lingeswaran M, Vishnoi JR, Pareek P, et al. Single Cell Omics of Breast Cancer: An Update on Characterization and Diagnosis. Indian J Clin Biochem. 2019 Jan;34(1):3–18. (IF: 2.2)
- 68. Dwivedi S, **Purohit P**, Misra R, Pareek P, Vishnoi JR, Misra S, et al. Methods for Isolation of High Quality and Quantity of miRNA and Single Cell Suspension for Flow-Cytometry from Breast Cancer Tissue: A Comparative Analysis. Indian J Clin Biochem. 2019 Jan;34(1):39–44. (IF: 2.2)
- 69. Mitra P, Sharma S, **Purohit P**, Sharma P. Clinical and molecular aspects of lead toxicity: An update. Critical Reviews in Clinical Laboratory Sciences. 2017 Nov 17;54(7–8):506–28. (IF:7.7)
- 70. Dwivedi S, **Purohit P**, Misra R, Pareek P, Goel A, Khattri S, et al. Diseases and Molecular Diagnostics: A Step Closer to Precision Medicine. Ind J Clin Biochem. 2017 Oct 1;32(4):374–98. (IF: 2.2)
- 71. **Purohit P**, Khera D, Sharma P, Singh K. A Case of Massive Hypertriglyceridemia in 6 Year Old Boy. Indian J Clin Biochem. 2017 Oct;32(4):493–5. (IF: 2.2)
- 72. **Purohit P**, Nebhinani N, Sharma P. Evaluation of Antioxidant Status, High Sensitivity C-reactive Protein, and Insulin Resistance in Male Chronic Opiate Users Without Comorbidities. Indian J Psychol Med. 2017;39(3):299–305. (IF: 0.30)
- 73. **Purohit P**, Garg K, Singh V, Dwivedi S, Sharma P. Microalbuminuria in Obese Young and Middle Aged Population: A Potential Marker of Cardiovascular Risk. Indian J Clin Biochem. 2016 Jul;31(3):349–52. (IF: 2.2)

- 74. Sharma P, Gupta A, **Purohit P**. Cardiovascular Risk Factors Insulin Resistance [IR], High Sensitivity C-reactive Protein (hs-CRP) and Fibrinogen in Pre- Menopausal women with Poly cystic ovarian syndrome (PCOS). J Cardiovasc Dis Res. 2015 May 18;6(2):67–71. (IF:0.15)
- 75. Sharma P, **Purohit P.** Lead Exposure Exacerbates Cardiovascular Risk. Ind J Clin Biochem. 2014 Apr;29(2):117–8. (IF: 2.2)
- 76. Das V, Das A, **Purohit P**, Sharma P. Metabolic syndrome in pediatric age A group requiring intensive review. J Obes Metab Res. 2014;1(4):238.
- 77. Purohit P, Sharma P. Metabolic Syndrome in Hypothyroidism Leading to Type 2 Diabetes Mellitus: A Cross-sectional Study of Western Rajasthan. J Obes Metab Res. 2014;1(2):105. (IF: 0.5)
- 78. **Purohit P**. A correlation study of CVD risk factors in Type 2 diabetics of Western Rajasthan. Int J Diabetes Dev Ctries. 2014 Dec 1;34(4):215–9. (IF:1.03)
- 79. Sharma P, **Purohit P**, Gupta R. Cardiac risk factors in descendants of parents with history of coronary artery disease (CAD): an evaluation focusing on small dense low density lipoprotein cholesterol (sdLDLc) and high density lipoprotein cholesterol (HDLc). Indian J Biochem Biophys. 2013 Oct;50(5):453–61. (IF: 2.2)
- 80. **Purohit P**, Mathur R. Hypertension Association with Serum Lipoproteins, Insulin, Insulin Resistance and C-Peptide: Unexplored Forte of Cardiovascular Risk in Hypothyroidism. N Am J Med Sci. 2013 Mar;5(3):195–201. (IF: 0.5)
- 81. **Purohit P**. A cross-sectional study of type-2 diabetic females at a higher CVD risk owing to a strong correlation of Systolic hypertension to CVD risk factors. Int J Biol Med Res. 2012;3(3):1905–9.
- 82. **Purohit P**. Cardiovascular diseases risk evaluation in newly diagnosed type-2 diabetics: An association of novel biomarkers apo proteins and C-peptide. Indian J Endocrinol Metab. 2012 Nov;16(6):1061–2. (IF: 1.7)
- 83. **Purohit P**. Estimation of serum insulin, Homeostasis model assessment-insulin resistance and C-peptide can help identify possible cardiovascular disease risk in thyroid disorder patients. Indian J Endocrinol Metab. 2012 Mar;16 Suppl 1(Suppl1):S97–103. (IF: 1.7)

Books & Chapters

- **Book on Practical Biochemistry published by** Jaypee Medical Publishers published in August 2012.
- 2. Textbook Essentials of Biochemistry for BDS & allied sciences by Jaypee Medical Publishers. Published November 2015
- 3. Genetic engineering: towards gene therapy and molecular medicine.
 Shailendra Dwivedi, Purvi Purohit, Yogesh Mittal, Garima Gupta, Apul Goel, Rakesh Chandra Verma, Sanjay Khattri, Praveen Sharma, Sanjeev Misra, Kamlesh Kumar Pant. Academic Press imprint: Elsevier, USA 2017 ISBN No-0128047496, 9780128047491.
- **4. Precision medicine in Ovarian Carcinoma.** Shailendra Dwivedi, Purvi Purohit, Apul Goel, Puneet Pareek, Sanjay Khattri, Praveen Sharma, Sanjeev Misra and Kamlesh Kumar Pant. (Accepted) 9781498775601 pub: 2018-08-21
- 5. Molecular Diagnosis in Ovarian Carcinoma. Shailendra Dwivedi, Radhieka Misra, Purvi Purohit, Jeewan Ram Vishnoi, Puneet Pareek, Apul Goel, Sanjay Khattri, Praveen Sharma, Kamlesh Kumar Pant, Sanjeev Misra. (2019) In:

- Shukla K., Sharma P., Misra S. (eds) Molecular Diagnostics in Cancer Patients. Springer, Singapore
- **6. Biotechnology in Healthcare**: Technologies and Innovations Volume 1, Chapter 14: Gene therapy and gene editing in healthcare. Elsevier (2021)

Awards:

- 1. NIMS Best poster award in non-cancer category, 41st ACBICON 2014, AIIMS Jodhpur.
- 2. IFCC Roche Travel Award, 14th APFCB November 2016, Taipei (Taiwan).
- 3. ICMR Travel grant for AACC July 2018, Chicago (USA).
- 4. Global Investigator Award 2021 at LMCE organised by Korean Society of Clinical Chemistry.

Projects:

Extramural

As PI

1. Research Society for Study of Diabetes in India Analysis of the role of circulating MicroRNAs and PTEN for immune homeostasis of TH9, TH-22 and Treg cells in Diabetic Nephropathy. Sanctioned as PI (January 2022)

As Co-PI

- 1. **Dept of Biotechnology (DBT)** National Inherited Diseases Administration (NIDAN) Kendra **Sanctioned as Co-PI (December 2018)**
- 2. ICMR Core grant: An observational study analysing the post-mortem interval in Human cadavers using autophagy proteins- Sanctioned as Co-PI
- 3. Dept of Health Research-Grant in-aid (DHR GIA) 2019-20: Stimulating medical students interest in medical genetics: Randomized controlled trial of an innovative educational intervention. Sanctioned as Co-PI (November 2019)
- **4. DHR GIA 2019-20:** Predictive value of progression of various stages of depression to suicide by Epigenetic modification of FKBP 5 gene. **Sanctioned as Co-PI**
- 5. DHR GIA 2019-20: An observational study of prevalence of Vitamin D deficiency in pregnant Indian females and its association with Gestational Diabetes. Sanctioned as Co-PI (March 2020)
- **6. ICMR-Adhoc** To study the prevalence of Bisphenol A toxicity and its metabolic and hormonal effects in females with Polycystic Ovary Syndrome **-Sanctioned as Co-PI 2022**
- 7. A Clinical Applicability Study of the Tumour Specific Electroporation Technique for Patients with locally advanced or recurrent Head & Neck cancer using IQwave 3.0 CE. Indo-Sweden Collaboration Programme. As Co-PI 2022
- 8. Beyond Symptom Relief: Ayurveda vs. Conventional Care for Knee Osteoarthritis -An Open-Label Comparative Study on Clinical-Epigenetics and Gait Kinematics AYUSH-ICMR Advanced Centre for Integrative Health Research (Feb 2025)
- 9. Integrated Health Model for Pulmonary Rehabilitation in COPD and Pneumoconioses- AYUSH-ICMR Advanced Centre for Integrative Health Research (Feb 2025)

Intramural

As PI

- 1. Effect of Bisphenol A on epigenetic modification of GDF 15 and hallmarks of cancer (cell cycle, EMT, drug resistance & stemness)-Intramural 2023-24 AIIMS Jodhpur [ongoing]
- 2. Analysing role of GDF-15 in association with Glyco-genes and their aberrant methylation leading to Drug resistance and Stemness of Breast Cancer. AIIMS Jodhpur, Intramural Project 2022-23 as PI. AIIMS Jodhpur [complete]
- 3. A case-control study analysing the role of GDF-15 in the induction of stemness of Triple Negative Breast Cancer Intramural (2018-19) as PI [completed]
- **4.** A case-control study of circulating GDF-15, miRNAs (21, 181b) and PBMs Smad7 in obese pre-diabetics and type 2 diabetics. AIIMS Jodhpur, Intramural Project 2017-18 as PI. **[Complete]**
- 5. A pilot study of pro-inflammatory and anti-inflammatory miRNAs (miR-155 & miR-187) expression in opioid-dependent patients. AIIMS Jodhpur, Intramural Project 2015-16 as PI. [Complete]
- 6. A correlation study of Cardio metabolic risk parameters and Urinary Opiates in Opioid dependent patients of Western Rajasthan. (AIIMS Jodhpur Intramural Project) as PI (2014-15) [Complete]

As Co-PI

- 1. Serial estimation of serum HMGB1 levels to determine Post Mortem Interval in human Cadavers. AIIMS Jodhpur, Intramural Project 2015-16 as Co-PI. [Complete]
- 2. Evaluate the expression of c-fos and correlate with miRNA 101 and 155 in oral premalignant and malignant lesions. AIIMS Jodhpur, Intramural Project 2016-17 as Co-PI. [Complete]
- **3.** Role of magnesium supplementation in Vitamin D deficiency, AIIMS Jodhpur, Intramural Project 2016-17 as Co-PI. [Complete]
- **4.** Evaluation of the role of cardiovascular autonomic function and peripheral vascular endothelial function in patients with primary hyperhidrosis: A prospective, investigational study. AIIMS Jodhpur, Intramural Project 2016-17 as Co-PI. [Complete]
- **5.** Evaluating the dynamics of breast cancer stem cells with apoptosis, necrosis, Angiogenesis and cell cycle regulating miRNA (miR 221-3p, miR133a-3p and miR 9-5p) in patients undergoing systemic neoadjuvant or palliative chemotherapy for breast cancer. AIIMS Jodhpur, Intramural Project 2017-18, as CO- PI. [complete]
- **6.** Expression of miRNA (miR 187 & mir 146) and their association with pro and anti-inflammatory cytokines(IL-18 & IL-10) and transcriptional factor NF-kB in pregnancies complicated by preeclampsia. As Co-PI [complete]
- 7. Characterization of organ specific microRNA expression in human tissues: A pilot study. AIIMS Jodhpur, Intramural Project 2017-18, as CO- PI. [complete]
- **8.** Correlation of Apoptosis, Angiogenesis and cell cycle regulating miRNA (miR 221-3p, miR133a-3p and miR 9-5p) with Global methylation and promoter-specific methylation of the P16, SOCS-1, and SHP-1 genes and their expression in patients of Oral submucous fibrosis and Oral squamous cell carcinoma. AIIMS Jodhpur, Intramural Project 2017-18, as CO- PI. **[completed]**

- Beta defensin expression in malignant head and neck tumors. Intramural (2018-19) as CoPI [completed]
- **10.** Expression and association of MicroRNAs (miR-424 and miR-519d) in pregnancies complicated by Fetal Growth restriction via KLF 6 and MT1-MMP (MMP-14) pathways. AIIMS Jodhpur, Intramural Project, as CO- PI. Intramural (2020-22) **[ongoing]**
- 11. Analysing cell free DNA (cfDNA) levels in benign and malignant ovarian tumor and its correlation with histopathological subtypes of ovarian cancer. [ongoing] (2022-24)
- 12. Role of ctdna in Oral Cancer: A Proof-of-Concept Study. Intramural AIIMS Jodhpur (2025-27)

ICMR STS

- 1. STS 2015 A Study of Microalbuminuria in obese young adults as potential marker of cardiovascular risk. [Approved and Published]
- 2. STS 2016- approved and ongoing A study of microalbuminuria (MAB) in chronic obstructive pulmonary disease (COPD) patients with and without comorbidities. [Approved and Published]
- 3. A pilot study of pre-diabetes and autoimmune thyroiditis in obese and non-obese Polycystic ovarian syndrome (PCOS) women. ICMR STS [Completed 2016-17 and approved]

Organizing events:

- 1. 4th CSIR funded Mammalian Cell Culture Workshop 2025 (24 March to 28 March 2025
- 2. 3rd Mammalian Cell Culture Workshop 2024 (11 March to 16 March 2024)
- 3. 1st Lab Professionals Week CME 2023 (24 April-29 April 2023)
- 4. 2nd Animal Cell Culture Workshop 2023 (28 Feb 5 March 2023)-Organizing Secretary
- 5. 1st Animal Cell Culture Workshop 2022- (18 23 April 2022)- Organizing Secretary
- 6. 15th Asia Pacific Federation of Clinical Biochemistry conference November 2019 Treasurer

Workshops & Training done:

- 1. Basic SPSS hands-on workshop, AIIMS Jodhpur.
- 2. Basic Molecular Biology Techniques, at MGIMS, Sevagram Wardha.
- 3. Workshop on Flowcytometry, 41st ACBICON, AIIMS Jodhpur.
- 4. Internal auditor's course by NABL, AIIMS Jodhpur.
- 5. Hands on Workshop on Reference intervals, 14th APFCB Taipei 2016.
- 6. Research methodology online course, NPTEL, 2017.
- 7. Hands on Animal Cell Culture training, NIT Rourkela.
- 8. Research Grant writing workshop, AIIMS Jodhpur, 2017.
- 9. Hands on Microarray workshop, 44th ACBICON 2017, Lucknow.
- 10. Certificate course on ethics in research at AIIMS Jodhpur May 2018.

- 11. Workshop on Next gen Sequencing and Micro array at 45th ACBICON 2018, Goa.
- 12. Mastercourse Hospital Quality System in Healthcare Certificate. (March 2021)
- 13. 24th Indo-US Flowcytometry Workshop (February 2023) IIT Gandhinagar
- 14. AACC online course Improving Quality in Point-Of-Care Testing and Advancing Your Career (2023)

Conference presentations:

- 1. High CVD risk in hypothyroid females of Jodhpur region: A strong association of HOMA IR with Lipid profile & Apo proteins. Proceedings of 38th ACBICON 2011. (Oral presentation)
- 2. Role of C peptide in hypothyroid patients for early diagnosis of Type 2 Diabetes Mellitus. Proceedings of 38th ACBICON 2011. (Poster presentation)
- 3. Correlation of serum apo proteins (apo a1 & apo –b) to c peptide in newly diagnosed type -2 diabetes mellitus impact on CVD risk evaluation. Proceedings of 10th World Congress of Insulin resistance, Diabetes and CVD. (2013) Abstracts. Endocrine Practice: January 2013, Vol. 19, No. 1, pp. 1A-45A. (doi: http://dx.doi.org/10.4158/endp.19.1.j0hx5p4622v5135h) (Poster presentation)
- Hypertension, Obesity & Non HDLc in newly diagnosed type 2 diabetic females of Western Rajasthan a CVD disaster. 10th World Congress of Insulin resistance, Diabetes and CVD. 10th WCIRDC, (2013) Abstracts. Endocrine Practice: January 2013, Vol. 19, No. 1, pp. 1A-45A. (doi: http://dx.doi.org/10.4158/endp.19.1.j0hx5p4622v5135h) (Poster presentation)
- 5. Metabolic syndrome in Hypothyroidism analysis of type 2 diabetes & cardiovascular risk. Proceedings of 13th Asia Pacific Federation of Clinical Biochemistry and Laboratory Medicine Congress October 2013.
- 6. Insulin resistance and secretory functions in Pre-diabetics and newly diagnosed diabetics of north-west India: role of adipocyte mediators. AACC July 2014 presented. CLINICAL CHEMISTRY, Vol. 60, No. 10, Supplement, 2014
- 7. A Comparison of CVD risk in newly diagnosed hypothyroid and type 2 diabetes mellitus subjects using Framingham risk score sheet. AACC 2014, Chicago. CLINICAL CHEMISTRY, Vol. 60, No. 10, Supplement, 2014
- 8. C-peptide and apo-proteins Novel markers of cardiovascular disease risk in Hypothyroidism. Poster presentation at 41st ACBICON 2014, AIIMS Jodhpur (NIMS best poster award)
- 9. C-peptide a novel risk factor for CVD risk in hypothyroidism. AACC 2015. Poster presentation. AACC 2015, Atlanta, *Clinical Chemistry*, Volume 61, Number S10.

- CVD risk beyond LDLc: Non HDLc, Insulin, Insulin resistance (IR) and apoproteins in overt hypothyroidism. 42nd ACBICON Invited Lecture, PGI Chandigarh, Nov 2015.
- 11. **IFCC Roche travel award 2016 for the presentation** "Serum Insulin and Hs CRP Correlated to Antioxidant Status of Opiate Dependent Males". Poster presentation at 14th APFCB Taiwan 2016.
- 12. Evaluation of cardio-metabolic profile of male chronic opiate abusers at a tertiary care centre. 43rd ACBICON 2016 Oral Presentation.
- 13. Correlation of Oxidative stress and Cardio-Metabolic retributions in Chronic Opiate abusers without co-morbidities. Clin Chem Lab Med 2017; 55, Special Suppl, pp S1 S1121, June 2017. Euromedlab 2017.
- 14. Predictors of Metabolic syndrome in patients with depression: An exploratory study from north-western India. Clin Chem Lab Med 2017; 55, Special Suppl, pp S1 S1121, June 2017. Euromedlab 2017.
- 15. A Pilot study of Insulin resistance, Oxidative stress and chronic inflammation in Opiate dependent males of Western Rajasthan. 44th ACBICON 2017 Oral presentation.
- 16. Effect of opiate abuse on miRNA 155 and 187 and inflammatory cytokines in chronic opiate dependent male addicts. *Purohit P *1*, *Dwivedi S*, *Nebhinani N2 Sharma P1*. 70th AACC 2018 Chicago (ICMR Travel Award)
- 17. Pro and Anti-inflammatory miRNA balance in chronic opiate abusers based on duration of addiction. *Purohit P *1*, *Sharma P1*, *Dwivedi S, Nebhinani N2*. 70th AACC 2018 Chicago
- 18. A Pilot study of serum Growth Differentiation fator-15 in obese type 2 Diabetes Mellitus patients at a tertiary care centre. Roy D, Modi A, Purohit P, Shukla R, Sharma P. 45th ACBICON 2018, Goa. (Best Poster Awarded)
- 19. A pilot study of autoimmune thyroiditis and pre-diabetes in poly cystic ovarian syndrome. Sharma M, **Purohit P**, Goyal M, Modi A, Mufeeth M. 45th ACBICON 2018, Goa.
- 20. Role of HMGB1 in prediction of time since death. *Setia P, Shedge R, Modi A, Purohit P.* Abstract selected for oral presentation at 71st American Association of Forensic Science Meeting, Maryland, Baltimore in February 2019.
- 21. A pilot study of Micro RNA21-5p as a potential biomarker in obese pre-diabetes and Type 2 Diabetes mellitus. *Purohit P, Roy D, Modi A, Sharma P, Shukla R*. 23rd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine, Barcelona, 19-23 May 2019 Poster presentation.
- 22. Lead exposure affects 5HT2A Serotonin Receptor and Transporter expression in Paediatric age group: An Explorative Study in North-Western India. *Sharma P*,

- *Lingeswaran M, Dwivedi S, Nebhinani N, Purohit P*. EFLM European Congress of Clinical Chemistry and Laboratory Medicine, Barcelona, 19-23 May 2019 Poster presentation.
- 23. Raghumoy Ghosh, PVSN Kiran Kumar, Prasenjit Mitra, **Purvi Purohit,** Naresh Nebhinani, Praveen Sharma. Elevated circulating Th17 count points towards Th17 dependent neuro inflammation in MDD." at the 15th Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine Congress (APFCB 2019), 17th 20th November 2019, Jaipur, India. Ind J Clin Biochem 34(S1), 1–233. doi:10.1007/s12291-019-00859-4
- 24. Roy D, Modi A, Khokhar M, Chaudhary R, Shukla RG, Sankanagoudar S, **Purohit P**, Sharma P Role of microRNA-181b and Growth Differentiation Factor-15 on insulin resistance in Type II diabetes at the 15th Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine Congress (APFCB 2019), 17th 20th November 2019, Jaipur, India. Ind J Clin Biochem 34(S1), 1–233. doi:10.1007/s12291-019-00859-4
- 25. Agarwal R, Roy D, Modi A, Khokhar M, Purohit P, Sharma P. A pilot study of serum Growth Differentiation Factor-15 (GDF-15) and its association with serum insulin and HOMA-beta in Type 2 diabetes mellitus at the 15th Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine Congress (APFCB 2019), 17th 20th November 2019, Jaipur, India. Ind J Clin Biochem 34(S1), 1–233. doi:10.1007/s12291-019-00859-4
- 26. Purohit P, Modi A, Sharma S, Vishnoi J, Pareek P, Elhence P, Sharma P. A pilot study exploring role of Growth Differentiation Factor 15 as a Cause of Drug Résistance in Breast cancer at the 15th Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine Congress (APFCB 2019), 17th 20th November 2019, Jaipur, India. Ind J Clin Biochem 34(S1), 1–233. doi:10.1007/s12291-019-00859-4
- 27. Khokhar M, Yadav D, Shukla RG, Purohit P, Bajpai N, Sharma P. 2019. An Empirical Study of Circulating miR-21 as a Potential Biomarker in Type-2 Diabetes Mellitus. Ind J Clin Biochem 34(S1), 1–233. doi:10.1007/s12291-019-00859-4.
- 28. Purohit P, Roy D, Modi A, Choudhary R, Shukla RP, Sharma P. Circulating and visceral adipose tissue miR-330-3p is associated with insulin resistance in Type II Diabetes Mellitus. Metabolism. March 2021; 116:154552. 18th Annual World Congress on Insulin Resistance Diabetes & Camp; cardiovascular disease.
- 29. Modi A, Roy D, Purohit P, Pareek P, Vishnoi J. Analysis of Serum Growth Differentiation Factor-15 in Progression of Breast Cancer in Type II Diabetes Mellitus Patients. Metabolism. March 2021; 116(Suppl):154538.https://doi.org/10.1016/j.metabol.2020.154538. Annual World Congress on Insulin Resistance Diabetes & Diabetes &
- 30. Purohit P, Roy D, Modi A, Khokhar M, Chaudhary R, Sankanagoudar S, Sharma P. Regulatory role of circulating miR-21 and its association with growth differentiation

- factor-15 in obese prediabetes and type 2 diabetes mellitus patients. Mol. Biol. Cell 31 (26), 2863-2863. https://doi.org/10.1091/mbc.E20-10-0665.
- 31. Gadwal A, Modi A, Khokhar M, Purohit P. In silico analysis of differentially expressed genes for lymph node and skin metastasis in breast cancer. LMCE 2021 (Laboratory Medicine Congress & Exhibition) & Exhibition) & Meeting.
- 32. Khokhar M, Purohit P, Gadwal A, Tomo S, Yadav D, Sharma P. Comparative interactomical analysis for the molecular regulatory network of the glomerulosclerosis and diabetic nephropathy. LMCE 2021 (Laboratory Medicine Congress & Exhibition) & Annual Meeting.
- 33. Khokhar M, Purohit P, Gadwal A, Tomo S, Bajpai NK, Bohra GK, Yadav D, Sharma P. A combinatory approach of clinical and interactomics analysis to understand the role of NF-kB1 in Diabetic Nephropathy. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India RSSDI 2021. (Oral Presentation)
- 34. Khokhar M, Gadwal A, Roy D, Tomo S, Purohit P. An Integrative genomics and interactomics approach to understand the progression of Diabetic Nephropathy. 47th National Conference of Association of Clinical Biochemists of India (ACBICON 2021).
- 35. Roy D, Purohit P, Modi A, Khokhar M, Sankanagoudar S, Choudhary R, Sharma P; Visceral adipose tissue Smad7 and miR-181b-5p possibly regulate insulin resistance in obesity. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India –RSSDI 2021. (Oral Presentation)
- 36. Purohit P, Roy D, Modi A, Khokhar M, Sankanagoudar S, Choudhary R, Sharma P;Serum GDF-15, peripheral blood SMAD7, and insulin resistance in obese prediabetic subjects: a correlation study. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India RSSDI 2021. (Oral Presentation)
- 37. Modi A, Purohit P, Roy D, Vishnoi JR, Pareek P, Elhence P, Sharma S, Sharma P.quot; GDF15 Induces Drug Resistance in Breast Cancer Through FOXM1. 47th National Conference of Association of Clinical Biochemists of India (ACBICON 2021).
- 38. Purohit P, Roy D, Modi A, Khokhar M, Chaudhary R, Sankanagoudar S, Sharma P. Regulatory role of circulating miR-21 and its association with growth differentiation factor-15 in obese prediabetes and type 2 diabetes mellitus patients. Mol. Biol. Cell 31 (26), 2863-2863. https://doi.org/10.1091/mbc.E20-10-0665.
- 39. Gadwal A, Modi A, Khokhar M, Purohit P. In silico analysis of differentially expressed genes for lymph node and skin metastasis in breast cancer. LMCE 2021 (Laboratory Medicine Congress & Exhibition) & Exhibition) & Annual Meeting.
- 40. Khokhar M, Purohit P, Gadwal A, Tomo S, Yadav D, Sharma P. Comparative interactomical analysis for the molecular regulatory network of the glomerulosclerosis

- and diabetic nephropathy. LMCE 2021 (Laboratory Medicine Congress & Exhibition) & Exhibition) & Annual Meeting.
- 41. Khokhar M, Purohit P, Gadwal A, Tomo S, Bajpai NK, Bohra GK, Yadav D, Sharma P.A combinatory approach of clinical and interactomics analysis to understand the role of NF-kB1 in Diabetic Nephropathy. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India RSSDI 2021. (Oral Presentation)
- 42. Khokhar M, Gadwal A, Roy D, Tomo S, Purohit P. An Integrative genomics an interactomics approach to understand the progression of Diabetic Nephropathy. 47th National Conference of Association of Clinical Biochemists of India (ACBICON 2021).
- 43. Roy D, Purohit P, Modi A, Khokhar M, Sankanagoudar S, Choudhary R, Sharma P; Visceral adipose tissue Smad7 and miR-181b-5p possibly regulate insulin resistance in obesity. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India RSSDI 2021. (Oral Presentation)
- 44. Purohit P, Roy D, Modi A, Khokhar M, Sankanagoudar S, Choudhary R, Sharma P; Serum GDF-15, peripheral blood SMAD7, and insulin resistance in obese pre-diabetic subjects: a correlation study. 49th Annual Digital Meeting of Research Society for Study of Diabetes in India RSSDI 2021. (Oral Presentation)
- 45. Mechanistic role of PTEN, MMP2, NF- κβ, their regulating miRNAs and serum IL-9 in progression of Diabetic Nephropathy. 50th RSSDI Conference 2022, Chennai
- 46. Immune imbalance between Th17 and effector regulatory T cells and impaired IL-10 production in Type 2 Diabetes Mellitus. 48th ACBICON 2022, New Delhi.
- 47. PU.1- and IL-9-Dependent Immune-regulation in Type 2 Diabetics and Diabetic Nephropathy-A Case Control Study. LMCE & 63rd KSLM Meeting 2022
- 48. Immune imbalance between Th9 and effector T regulatory and T regulatory like Th9 cells causes pro-inflammatory state in Type 2 Diabetes Mellitus and Diabetic Nephropathy. 24th Indo-US Flowcytometry workshop by TETC
- 49. Purohit P, Khokhar M, Gadwal A, Bajpai N, Shukla R K, Yadav D, Praveen Sharma. PU The Integrative Role of Circulating MMP9 in Type 2 Diabetes mellitus: A combinatoryapproach of clinical and interactomics analysis. 59th AACB Annual Scientific hybrid Conference Perth, Western Australia 18th-20th October 2022.
- 50. P. Purohit, M. Khokhar, N.K. Bajpai, R.K. Shukla, Role of Matrix metalloproteinases and COL4A in Type 2 Diabetes Mellitus and Diabetic Nephropathy Progression, World Lab Euromad Roma 2023. 21-25 May 2023.
- 51. **Invited Symposium speaker at 49**th **ACBICON 2023**, Kerala on Immune & Inflammatory markers in DKD: novel therapeutic targets.
- 52. **Poster presentation at IAFS 2023, Sydney -** Purohit P*, Thakral S1, Sinha A2, Mishra R3, Setia P4. Analysis of gene expression of cardiac-specific gene NT-proBNP and Cardiac troponin I to estimate post-mortem interval
- 53. **Poster presentation at IAFS 2023, Sydney -** Deepu Mathew1, Puneet Setia*, Ashita Gadwal2, Raghavendra Sharma3, Vikas Meshram4 and Purvi Purohit5.
- 54. Invited speaker at symposium in 12th IABSCON 2024, AIIMS Patna, titled Breast Cancer glycosylation & Inflammation: the emerging hallmarks

- 55. Manoj Khokhar, <u>Purvi Purohit</u>, Ashita Gadwal, Nitin Kumar Bajpai, Ravindra Kumar Shukla. Th9 Unravelling Molecular Pathways Across Disease Spectra and Exploring Immune Dysregulation in Type 2 Diabetes Mellitus with a Focus on Diabetic Nephropathy, 1 st -3 rd Feb 2024, North Zone ACBICON AIIMS Jodhpur.
- 56. Manoj Khokhar, <u>Purvi Purohit</u>, Ashita Gadwal, Nitin Kumar Bajpai, Ravindra Kumar Shukla. Exploring the Immunological Dynamics of Th9 and Treg Cell Homeostasis in the Progression of Diabetic Nephropathy. National Conference on Advances in Biochemical Sciences: Basic to Translational Research, 20th 21 th March, 2024, Central University of Rajasthan, Ajmer.
- 57. ICGA October 2023-Pune for poster presentation. Ashita Gadwal, Purvi Purohit*, Jeewan Ram Vishnoi, Puneet Pareek, Ramkaran Choudhary, Poonam Elhence, Mithu Banerjee, Praveen Sharma. Identification of potential key genes and their regulatory microRNAs in lymph node and skin metastasis in breast cancer using in silico analysis
- 58. IABSCON February 2024- AIIMS Patna- Oral Presentation Ashita Gadwal, Purvi Purohit *, Jeewan Ram Vishnoi, Puneet Pareek, Ramkaran Choudhary , Poonam Elhence , Mithu Banerjee , Praveen Sharma GALNT14 promotes stemness and drug resistance through β -catenin signalling pathway in breast cancer.
- 59. Manoj Khokhar, Purvi Purohit, Ashita Gadwal, Nitin Kumar Bajpai, Ravindra Kumar Shukla. Th9 Unravelling Molecular Pathways Across Disease Spectra and Exploring Immune Dysregulation in Type 2 Diabetes Mellitus with a Focus on Diabetic Nephropathy, 1 st -3 rd Feb. 2024, North Zone ACBICON AIIMS Jodhpur.
- **60.** Manoj Khokhar, Purvi Purohit, Ashita Gadwal, Nitin Kumar Bajpai, Ravindra Kumar Shukla. Exploring the Immunological Dynamics of Th9 and Treg Cell Homeostasis in the Progression of Diabetic Nephropathy. National Conference on Advances in Biochemical Sciences: Basic to Translational Research, 20 th 21 th March, 2024, Central University of Rajasthan, Ajmer.
- 61. **Invited Talk at 2nd RSSDII Research retreat 2024:** Metformin mediates MicroRNA-21 regulated circulating Matrix Metalloproteinase-9 in Diabetic Nephropathy: an In-Silico and clinical study.
- 62. **Poster presentation at EACR 2024.** Purvi Purohit, Ashita Gadwal Jeewan Ram Vishnoi, Puneet Pareek, Ramkaran Choudhary, Poonam Elhence, Mithu Banerjee, Praveen Sharma. Promoter methylation of GALNT6 & 14 induces drug resistance and stemness of Breast Cancer via Beta-catenin and Galectin-3.
- 63. **Poster presentation at EACR 2024.** Ashita Gadwal, Purvi Purohit, Jeewan Ram Vishnoi, Puneet Pareek, Ramkaran Choudhary, Poonam Elhence, Mithu Banerjee, Praveen Sharma. Drug resistance and stemness is promoted by GALNT14 and GDF-15 via β-catenin signaling pathway in breast cancer.
- **64. Poster presentation at** ICDLM 2025. Pragyan Panigrahi, Ashita Gadwal, Manu Goyal, Pratibha Singh, Mithu Banerjee, Shailja Sharma, Purvi Purohit Pilot study on serum FETUIN A and AGES levels in GDM patients and normal healthy pregnant women.

Chaired Sessions/ Invited Speaker

- 1. Chair session at 3rd Annual CCPSL Sessions, Colombo March 2018 Symposium on Endocrinology.
- 2. Chair Session, North Zone ACBICON April 2018.

- 3. Chair Session at 45th ACBICON, 2018, Goa Symposium on Micro RNA in Non-communicable diseases
- 4. Invited Faculty & Speaker at 45th ACBICON, 2018, Goa Symposium on Micro RNA in Non-communicable diseases
- 5. Invited Faculty & Speaker at 38th IACR 2019, PGIMER Chandigarh, 1 -3 March 2019.
- 6. Invited Speaker at 15th Asia Pacific Federation of Clinical Biochemistry & Laboratory Medicine, Jaipur November 2019.
- 7. Invited Speaker at 49th Conference of Research Society for Study of Diabetes in India (RSSDI), November 2021.
- 8. Invited Speaker 47th ACBICON 2021 Renal Symposium
- 9. Invited Speaker 49th ACBICON 2023 Immune & Inflammatory markers in DKD: novel therapeutic targets.
- 10. Invited Speaker 12th IABSCO 2024 Breast Cancer glycosylation & Inflammation: the emerging hallmarks
- 11. Invited Speaker North Zone ACBICON 2024
- 12. Chair Session IABSCON 2024 Non-communicable diseases
- 13. Chair Session IABSCON 2024 Students Presentation Competition
- 14. Chair Session North Zone ACBICON 2024 Students Presentation Competition
- 15. **Invited Talk at 2nd RSSDI Research retreat 2024:** Metformin mediates MicroRNA-21 regulated circulating Matrix Metalloproteinase-9 in Diabetic Nephropathy: an In-Silico and clinical study.

PG and PhD Students Supervisor

- 1. **Anupama Modi DBT Fellow (PhD, Jan 2018)** Exploring the role of Growth Differentiation Factor-15(GDF-15) in stemness and drug resistance of triple negative breast cancer. (Awarded)
- 2. **Manoj Khokar UGC Fellow (PhD, July 2018)** Analysing the role of PTEN and micro RNAs in immune homeostasis of TH9 and Treg cells in Diabetic nephropathy. (Awarded)
- 3. Ashita Gadhwal CSIR Fellow (PhD, July 2019)- Exploring epigenetic modification of Glyco-genes in association with GDF-15 and their role in breast cancer stemness and drug resistance. (Awarded)
- 4. **Dipayan Roy (MD Jan 2018)** working on Association of Growth Differentiation Factor-15 with expression of miRNA and Smad7 in type 2 diabetics- A case-control study. (Awarded)
- 5. Riddhi Agarwal (MSc, July 2018) working on- Analyzing expression of circulating hsa-miR-21 and GDF15 in Diabetic Nephropathy-Pilot study. (Awarded)
- 6. **Pragyan Panigrahi (MD Biochemistry, Jan 2022)** working on *Analysing the role of Galectin 3 and miR-34a-5p in gestational diabetic females. (Awarded)*
- 7. Vaishali Sharma UGC Fellow (PhD Jan 2023). Analysing the effect of Bisphenol A levels in association with HIF-1α and immune dysregulation-mediated progression of Diabetic Nephropathy. (Ongoing)
- 8. Dr. Satwik MD Biochemistry (2025). Analysing the tetrad of Bisphenol A, Oxidative stress, Fetuin A and Galectin-13 in Gestational Diabetes- a case control study. (Ongoing)

PG and PhD Students Co-Supervisor

- 1. Preeti Singh PhD(August 2017) Biochemistry
- 2. Taru Goyal PhD(August 2017) Biochemistry
- 3. Raghumoy Ghosh MD (Jan 2017) Biochemistry
- 4. Malvika Lingeswaran (MD Jan 2018) Biochemistry
- 5. Shweta Ukey PhD (Jan 2018) Biochemistry
- 6. Dr Bharati DM Neonatology (Jul 2018)
- 7. Dr Sujoy Ghosh (Jul 2018) MD Radiation Oncology
- 8. Dr Payal Patwa (Jul 2018) MD Obstetrics and Gynecology
- 9. Dr Ranesh Debbarma (Jan 2019) Obstetrics and Gynecology
- 10. Gyanendra MD (Jan 2019) CMFM
- 11. Sahil Thakral (2019 July) Forensic Medicine & Toxicology
- 12. Sanchi Sukheja (2019 July) MD Pharmacology
- 13. Vanishri July 2019 DM Endocrinology
- 14. Dr Divik 2020 July MD Pediatrics
- 15. Dr Deepu Mathew January 2021 MD Forensic Medicine & Toxicology
- 16. Dr Jyoti Sharma January 2021 MD Biochemistry
- 17. Ms Kanishka July 2021 MSc Biochemistry
- 18. Dr Anjali January 2022 MD Biochemistry
- 19. Ms Rani MSc Biochemistry (2022)
- 20. Ms Priyanka Pareek PhD (Jan 2023)
- 21. Dr Divya Chennaboina, MD Obs & Gyne (July 2023)
- 22. Dr Dharmaveer Choudhary MD FMT (2024)
- 23. Dr Mohd Akbar NG DM FMT (2024)
- 24. Dr Sambrama MD Pharmacology (2025)
- 25. Dr Apoorva Gupta MD FMT (2025)

Institutional administration and activities

- 1. Departmental Nodal Officer for Finance.
- 2. Member Translational Research Group.
- 3. Member of Oncology group of AIIMS Jodhpur for translational research (since Aug 2022).
- 4. Member of SURAKSHA CHAKKRA during COVID 19 pandemic.
- 5. Coordinator from Biochemistry for COVID-19 samples.
- 6. Member Translational Research Group on COVID 19.
- 7. Member Animal Ethics Committee, AIIMS Jodhpur (up to 2022).
- 8. Member Institutional Furniture verification committee (up to 2021).
- 9. Faculty In-charge Departmental Equipment
- 10. Nodal Officer for the procurement of Beckman DXI 800 from the American Association of Physicians of Indian Origin in 2022.
- 11. Co-ordinator of AIIMSJ-IITJ joint Medtech program from Dept of Biochemistry
- 12. Co-ordinator for BSc Nursing program from Dept of Biochemistry
- 13. Quality Manager IPD Biochemistry Lab
- 14. IPD Biochemistry Lab Faculty In-charge (from Dec 2018 up to April 2020)
- 15. Invited Member purchase committee at AIIMS Jodhpur
- 16. Nodal Officer for Bio-medical waste disposal from Dept of Biochemistry at AIIMS Jodhpur.
- 17. Committee member interview for Research Associate in project Genome India 12 June 2020, DHR project for Vit-D in GDM, Indo-Sweden Project.

Member of the Organizing Committee in various Academic meetings

- 1. Scientific committee member for EthicsCON 2014, AIIMS Jodhpur
- 2. Organizing committee member ACBICON 2015, AIIMS Jodhpur
- 3. Organizing Committee member LeadCon 2016, AIIMS Jodhpur
- 4. Organizing committee member North Zone ACBICON 2018, AIIMS Jodhpur
- 5. Organiser AFMC Quiz contest at 45th ACBICON 2018, Goa
- 6. Treasurer for 15th APFCB 2019 congress, Jaipur India
- 7. Organizing Committee member LeadCon (online) 2022
- 8. Organizing Committee member for the Flowcytometry Workshop Jan 2022
- 9. Organizing Committee member for the Molecular Biology Workshop 2021, 22, 23.
- 10. Organizing Committee member for the Hands on Workshop on Taq based SNP analysis Dec 2022.
- 11. Organizing Committee member for the DD-PCR workshop Jan 2023
- 12. Organizing Committee member for the North Zone ACBICON 2024
- 13. Organizing Committee member for the IFCC Flowcytometry Workshop 2023
- 14. Organizing Committee member for the DD-PCR workshop Jan 2024
- 15. Organizing Committee member for Molecular Biology Workshop 2025
- 16. Organizing Committee member for the IFCC Flowcytometry Workshop 2025

Dr. Purvi Purohit, Ph. D (Medicine) Biochemistry, dr.purvipurohit@gmail.com