

PUBLICATIONS

- [1] **Sachan manisha** and Raman R. (2006) Developmental methylation of the regulatory region of *HoxB5* gene in mouse correlates with its tissue-specific expression. **Gene**, 380 151-158. (IF:3.9)
- [2] **Sachan manisha** and Raman R. (2008) Developmental methylation of the coding region of *c-fos* occurs perinatally, stepwise, and sequentially in the laboratory mouse. **Gene**, 416 22-19. (IF:3.9)
- [3] Pamnani M, Sinha P, Nara S and **Sachan M** (2014) Study of promoter DNA methylation of Sox11 and its correlation with tissue-specific expression in the laboratory mouse. **Gene**, 552 133-139. (IF:3.9)
- [4] **Sachan M** and Raman R (2014) Unmethylated/hypomethylated status of developmentally important genes in brain tissue of mammals, **South Asian Journal of Experimental Biology** 4 226-231.
- [5] Singh S, Singh K, and **Sachan M** (2014) Association study of functional polymorphisms of DNMT3A and DNMT3B genes with breast carcinoma in north Indian population, **South Asian Journal of Experimental Biology** 5 121-126.
- [6] Kaur M and **Sachan M** (2015) Epigenetic modifications: Therapeutic potential in cancer **Brazilian Archives of Biology and Technology** 58 (4), 526-539. (IF:1.4)
- [7] Kanwal A, Kaur M, Singh A, Gupta S and **Sachan M**, (2016) Hypo/unmethylated promoter status of Cdk2 gene correlates with its over-expression in ovarian cancer in north Indian population **Cellular and Molecular Biology** 62 (1): 67-72. (IF:1.77)
- [8] Pamnani M, Sinha P, Singh A, Nara S and **Sachan M** (2016) Study of Sox9 and Oct4 promoter methylation and its correlation with expression during testis development in laboratory mouse **Genetics Molecular Biology** 39,3, DOI:10.1590/1678-4685-GMB-2015-0172. (IF:2.1)
- [9] Rastogi M, Gupta S and **Sachan M** (2016) Biomarkers towards Ovarian Cancer Diagnostics: Present and Future Prospects **Brazilian Archives of Biology and Technology** Vol.59: e16160070, Jan-Dec DOI:10.1590/1678-4324-2016160070. (IF:1.4)
- [10] Kaur M, Gupta S and **Sachan M** (2016) Development of a multiplex methylight assay for the detection of DAPK and SOX1 methylation in epithelial ovarian cancer in north Indian population. **Genes & Genetic Systems** Nov 26;91(3):175-181. (IF:1.5)
- [11] Sinha P, Singh K and **Sachan M** (2017) Heterogeneous pattern of DNA methylation in developmentally important genes correlates with its chromatin conformation. **BMC Molecular Biol** (2017) 18:1 DOI 10.1186/s12867-016-0078-. (IF:3.0)
- [12] Sinha P, Singh K, **Sachan M**. (2017) High resolution methylation analysis of the HoxA5 regulatory region in different somatic tissues of laboratory mouse during development **Gene Expr Patterns**. Jan;23-24:59-69. doi: 10.1016/j.gep.2017.03.004. (IF:1.5)
- [13] Singh A, Gupta S, **Sachan M**. (2019) Epigenetic Biomarkers in the Management of Ovarian Cancer: Current Perspectives. **Front Cell Dev Biol**. Sep 19;7:182. doi: 10.3389/fcell.2019.00182. (IF:6.7)
- [14] Singh A, Gupta S, Badarukhiya JA, **Sachan M**. (2020) Detection of aberrant methylation of HOXA9 and HIC1 through multiplex MethyLight assay in serum DNA for the early detection of epithelial ovarian cancer. **Int J Cancer**. Sep 15;147(6):1740-1752. doi: 10.1002/ijc.32984. (IF:7.4)
- [15] Tripathi P, **Sachan M**, Nara S. (2020) Novel ssDNA Ligand Against Ovarian Cancer Biomarker CA125 With Promising Diagnostic Potential. **Front Chem**. May 15;8:400. doi: 10.3389/fchem.2020.00400. (IF:5.5)
- [16] Tripathi P, Kumar A, **Sachan M**, Gupta S, Nara S. (2020) Aptamer-gold nanozyme based competitive lateral flow assay for rapid detection of CA125 in human serum. **Biosens Bioelectron**. 2020 Oct 1; 165:112368. doi: 10.1016/j.bios.2020.112368. (IF:12.5)
- [17] Tripathi DK, Varma RK, Singh S, **Sachan M**, Guerriero G, Kushwaha BK, Bhardwaj S, Ramawat N, Sharma S, Singh VP, Prasad SM, Chauhan DK, Dubey NK, Sahi S. (2020) Silicon tackles butachlor toxicity in rice seedlings by regulating anatomical characteristics, ascorbate-glutathione cycle, proline metabolism and levels of nutrients. **Sci Rep**. Aug 21;10(1):14078. doi: 10.1038/s41598-020-65124-8. (IF: 4.997)
- [18] Kumar V, Gupta S, Varma K, **Sachan M**. (2020) MicroRNA as Biomarker in Ovarian Cancer Management: Advantages and Challenges. **DNA Cell Biol**. 2020 Nov 6. doi: 10.1089/dna.2020.6024. (IF:3.55)
- [19] Singh A, Gupta S, **Sachan M**. (2021) Evaluation of the Diagnostic Potential of Candidate Hypermethylated Genes in Epithelial Ovarian Cancer in North Indian Population. **Front Mol Biosci**. 2021 Oct 28; 8:719056. doi: 10.3389/fmolb.2021.719056. eCollection 2021. (IF:6.2)
- [20] Kumar V, Gupta S, Chaurasia A, **Sachan M**. (2021) Evaluation of Diagnostic Potential of Epigenetically Deregulated MiRNAs in Epithelial Ovarian Cancer. **Front Oncol**. 2021 Oct 7;11:681872. doi: 10.3389/fonc.2021.681872. eCollection 2021. (IF:5.75)
- [21] Singh M, Tripathi P, Singh S, **Sachan M**, Chander V, Sharma GK, De UK, Kota S, Putty K, Singh RK, Nara S. (2021) Identification and characterization of DNA aptamers specific to VP2 protein of canine

- parvovirus. **Appl Microbial Biotechnology**. 2021 Dec;105(23):8895-8906. doi: 10.1007/s00253-021-11651-x. Epub 2021 Oct 29. (IF: 3.53)
- [22] Kumar V, Gupta S, Varma K, Chaurasia A, **Sachan M** (2022) Diagnostic performance of microRNA-34a, let-7f and microRNA-31 in epithelial ovarian cancer prediction 2022. *J Gynecol Oncol* Jul;33(4): e49. doi: 10.3802/jgo.2022.33.e49. (IF:4.75)
- [23] Bisht, D., Arora, A., & **Sachan, M.** (2022). Role of DNA De-methylation intermediate '5-hydroxymethylcytosine' in ovarian cancer management: A comprehensive review. *Biomedicine & Pharmacotherapy*, 155, 113674. <https://doi.org/10.1016/j.biopha.2022.113674> (IF:7.4)
- [24] Kumar V, Pandey A, Arora A, Gautam P, Bisht D, Gupta S, Chaurasia A and **Sachan M** (2023) Diagnostics and Therapeutic Potential of miR-205 and miR-34a in Ovarian Cancer Management: A miRNA-Target-Based Analysis 42;3, 1–12 **DNA Cell Biol**. DOI: 10.1089/dna.2022.0487 (IF:3.55)
- [25] Gautam P, Gupta S, **Sachan M.** (2023) Genome-wide expression profiling reveals novel biomarkers in epithelial ovarian cancer. *Pathol Res Pract*. Nov;251:154840. doi: 10.1016/j.prp.2023.154840. (IF:3.0)
- [26] Gupta S, Singh B, Abhishek R, Gupta S, **Sachan M.** (2024) The emerging role of liquid biopsy in oral squamous cell carcinoma detection: advantages and challenges. **Expert Rev Mol Diagn**. Apr 12:1-21. doi: 10.1080/14737159.2024.2340997. (IF:5.1)
- [27] Gautam P, Gupta S and Sachan M. (2024) Comprehensive DNA methylation profiling by MeDIP-NGS identifies potential genes and pathways for epithelial ovarian cancer. **Journal of Ovarian Research** 17:83 doi.org/10.1186/s13048-024-01395-3. (IF: 4.7)
- [28] Bhadra M, **Sachan M** and Nara S (2024) Current strategies for early epithelial ovarian cancer detection using miRNA as a potential tool. **Front Mol Biosci**. Apr. 11:1361601. DOI 10.3389/fmolb.2024.1361601. (IF:3.9)
- [29] Bhadra M, **Sachan M.** (2024) An overview of challenges associated with exosomal miRNA isolation toward liquid biopsy-based ovarian cancer detection. **Heliyon**. Apr 25;10(9):e30328. doi: 10.1016/j.heliyon.2024.e30328 (IF:3.4)

PATENT GRANTED:

(ii) Assay for detecting a target analyte from biological sample and a method of detection thereof.

Seema Nara, Pranav Tripathi and Manisha Sachan, MNNIT Allahabad

Patent No. 543707

Date of grant: 28.06.2024

PATENT FILED:

(i) A non-invasive assay and a method for early detection of ovarian cancer

Alka Singh and Manisha Sachan, MNNIT Allahabad

Application No. 2021-11002569

Date of Filing: 19.01.2021

BOOK CHAPTERS PUBLISHED:

S. No.	Author(s)	Year of Publication	Book Title	Title of Chapter if any	Page No. (if reqd)		ISBN/ISSN No.	National / International	Publisher
					From	To			
1.	Agarwal V, Sachan M, Sirohi P	2013	Recent Progress in medicinal plants Vol 38	Book Chapter: Herbal product-based remedies against microbial infections and resistance	343	370	ISBN: 1-933699-98-1	International	Studium Press LLC
2.	Sinha P, Nara S and Sachan M	2014	Horizons in Cancer Research Vol 53	Book Chapter: Epigenetic regulation of cancer	169	190	ISBN: 978-1-63117-246-5	International	Nova Science Publisher, New York
3.	Malik S, Sachan M and Nara S	2015	Advances in Neurotherapeutic Delivery Technologies	Book Chapter: Nano-Strategies for Neuroimaging and Diagnostics	142	157	ISBN: 978-1-63278-036-2	International	Omics Group
4.	Rastogi M, Sinha P, Gupta S and Sachan M	2016	Recent Advances in Ovarian Cancer	Book Chapter: Protein, Methylated DNA and Micro RNA: Potential	28	59	ISBN: 978-81-932583-4-	International	Avid Science, Germany

				Candidates Towards Sustainable Ovarian Cancer Diagnostics			7		
5.	Kumar V, Suhag M and Sachan M	2017	Horizons in Cancer Research Vol 67	Book Chapter: mi RNA as novel diagnostic and predictive biomarker in human cancer	1	50	ISBN:978-1-56311-058-6	International	Nova Science Publisher, New York
6.	Singh A and Sachan M	2017	Advances in Biotechnology Vol 1	Book Chapter 8: Cancer Epigenetics: Role of Epigenetic Events in the Onset and Progression of Cancer	1	31	978-93-87500-18-1	International	Open access ebook, WilmingtonDE
7.	Verma R K, Sachan, M, Vishwakarma, K, Upadhyay, N, Mishra R K, Tripathi D K, Sharma S	2018	Role of Rhizospheric Microbes in Soil: Volume 2: Nutrient Management and Crop Improvement,	Book Chapter: Role of PGPR in sustainable agriculture: Molecular approach toward disease suppression and growth promotion	259	290	978-981-13-0044-8	International	Springer, Singapore
8.	V Kumar, A Singh, P Gautam, M Sachan	2019	Biomedical Engineering and its Applications in Healthcare,	Book Chapter: Techniques/Tools to Study Epigenetic Biomarkers in Human Cancer Detection	327	351	978-981-13-3705-5	International	Springer, Singapore
9.	Bisht, D., Maddheshiya, S., Nara, S., & Sachan, M.	2023	Natural Products and Nano-Formulations in Cancer Chemoprevention	Book Chapter: Nano-Formulations of Chemotherapeutic Drugs: Recent Outlook, Advances, and Challenges in Cancer Management DOI: 10.1201/b23311-9	143	163	978-100-33-6896-0	International	CRC Press
10.	Srivastava, A., Rai, S., Bisht, D., Sachan, M., Jit, B. P., & Srivastava, S.	2022	In Protein Kinase Inhibitors	Targeting the altered tyrosine kinases in colorectal cancer: From inhibitors to drugs.	361	391		International	Academic Press.
11.	Gupta S, Singh B, Gupta S and Sachan M	2023	Horizons in Cancer Research. Volume 85	The Landscape of Genetic and Epigenetic Biomarkers in Oral Cancer: A Liquid Biopsy Approach	151	190	979-88697-730-1	International	Nova Science Publisher, New York
12.	Deepa Bisht, Mridula Bhadra, Nikita Sharma, and Manisha Sachan,	2023	Epigenetics Human Disease 3e, Vol 1	Aberrant DNA Methylation Signatures in Gynaecological Malignancies: Implications for early diagnosis, prognosis, and therapy	931	957	1978-04432-181-25	International	Elsevier