

## PUBLICATIONS

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#### **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

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

Alka Singh and Manisha Sachan, MNNIT Allahabad

Application No. 2021-11002569

Patent No.551661      Date of grant: 30.09.2024

#### **PATENT FILED:**

A method for quantification of a plurality of biomarkers for the management of ovarian cancer

Deepa Bisht and Manisha Sachan, MNNIT Allahabad

Application No.: 202511059969      Date of Filing: 23.06.2025

# 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 Candidates Towards Sustainable Ovarian Cancer Diagnostics  | 28                 | 59  | ISBN: 978-81-932583-4-7 | International            | Avid Science, Germany            |
| 5.     | Kumar V, Suhag M and Sachan M                                                         | 2017                | Horizons in Cancer Research Vol 67                                                         | Book Chapter: mi RNA as noval 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  | 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 of Human Diseases 3e, Vol 1                                                    | Aberrant DNA Methylation Signatures in Gynaecological Malignancies: Implications for early                                | 931                | 957 | 1978-04432-181-25       | International            | Elsevier                         |

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|     |                                 |      |                                                                   | diagnosis, prognosis, and therapy                                                         |     |     |                   |               |                |
| 13. | Nikita Singh and Manisha Sachan | 2025 | Epigenetics Methods (Second Edition)<br>Translational Epigenetics | Methylated DNA immunoprecipitation sequencing: Methodological principles and applications | 107 | 139 | 978-0-443-26759-8 | International | Academic Press |

CONFERENCE ABSTRACTS, PAPERS & POSTERS IN LAST FIVE YEARS:

| S.No | Title                                                                                                                                                                     | Source                                   | Year | Type                         |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------|------------------------------|
| 1    | Abstract LB117: Serum Cell Free DNA Based Duplex MethyLight Assay for Liquid Biopsy Based Detection of Epithelial Ovarian Cancer                                          | Cancer Research (AACR)                   | 2026 | Conference Abstract (Poster) |
| 2    | Abstract B010: Concurrent Analysis of Multiple Methylated CpG Sites Using Multiplex MethyLight Assay for Epithelial Ovarian Cancer Detection                              | Cancer Research (AACR)                   | 2025 | Conference Abstract (Poster) |
| 3    | Gold Nanozyme-Based Electrochemical Sensing of Epithelial Ovarian Cancer-Specific microRNA                                                                                | Conference Proceeding BIOSENSORS 2025    | 2025 | Conference Paper             |
| 4    | Epithelial Ovarian Cancer Early Diagnosis by miRNA Based Liquid Biopsy Approach                                                                                           | Gordon Research Conference               | 2024 | Conference Abstract (Poster) |
| 5    | Development of a novel multiplex Methylight assay for early detection of epithelial ovarian cancer using liquid biopsy approach                                           | Frontiers in Cancer Science 2023 (AACR)_ | 2023 | Conference Abstract (Poster) |
| 6    | Abstract 480: Aberrant Promoter Hypermethylation of HIC1 and SOX1 in Circulating Cell Free DNA as a Potential Biomarker for Noninvasive Early Detection of Ovarian Cancer | Cancer Research (AACR)                   | 2021 | Conference Abstract (Poster) |
| 7    | Abstract A13: DNA Methylation of SOX1 and HOXA9 as a Biomarker for Early Detection of Ovarian Cancer in Cell-Free DNA                                                     | Clinical Cancer Research (AACR)          | 2020 | Conference Abstract (Poster) |