



DR. D. Y. PATIL BIOTECHNOLOGY & BIOINFORMATICS INSTITUTE

DR. D. Y. PATIL VIDYAPEETH, PUNE

(Deemed to be University)

(Re-accredited by NAAC with a CGPA of 3.62 on a four- point scale at 'A' Grade)

(Category I University approved by UGC)

(An ISO 9001: 2015 & 140001:2015 Certified University),

Institute supported by DST-FIST & Approved by AICTE, Govt. of India

Prof. Nilesh Kumar Sharma



Designation : Professor
DR. D. Y. PATIL BIOTECHNOLOGY & BIOINFORMATICS INSTITUTE
DR. D. Y. PATIL VIDYAPEETH, PUNE

Date of Birth : 04/02/1979

Email ID : nilesh.sharma@dpu.edu.in
nksharmaitr@gmail.com

Phone Number : 020-67919451

RESEARCH PROFILE IDS AND WEBLINK

VIDWAN ID : <https://dpu.irins.org/profile/103121>

ORCID ID : <https://orcid.org/0000-0002-8774-3020>

Scopus Author ID : 16307935500

Google Scholar ID : <https://scholar.google.nl/citations?hl=en&user=BALQiUAAAAJ>

ResearchGate ID : https://www.researchgate.net/profile/Nilesh_Sharma9

AICTE FACULTY ID : 1-3700601924 (INSTITUTIONAL ID: 1-3667580281)

ACADEMIC QUALIFICATIONS

GATE (Life Science), CSIR-UGC JRF-NET (2003) Qualified

Ph.D. in Biotechnology (2009) –Indian Institute of Technology Roorkee, Roorkee, India

M.Sc. in (Plant Physiology and Molecular Biology) (2003) – College of Basic Science, G.B.P.U.A& T Pantnagar, Uttarakhand, First class

B.Sc. in (Agri. Science) (2001) - Dr. P.D.K.V, Akola,, MCAER, MH- First class, College Topper.
Higher Secondary in Science (1970) - W.B. Board of Secondary Education (Calcutta) – First Class

Higher Secondary (1995)-Bihar Intermediate Board, First Class

PROFESSIONAL EXPERIENCE: RESEARCH AND TEACHING

Position	Name of the Institution/ Industry	From (dd/mm/yyyy)	To (dd/mm/yyyy)
Assistant Professor	Jaipur National University, Jaipur, India	01/01/2009	01/06/2010
Post Doc	Rutgers University USA NIEHS,NIH,USA	10/06/2010	01/08/2013
Assistant Professor	Dr. D. Y. Patil Biotechnology and Bioinformatics Institute Pune	14/09/2013	30/04/2016
Associate Professor	Dr. D. Y. Patil Biotechnology and Bioinformatics Institute Pune	01/05/2016	27/02/2020
Professor	Dr. D. Y. Patil Biotechnology and Bioinformatics Institute Pune	28/02/2020	Till date

RESEARCH OVERVIEW

Area of Specialization :Tumor heterogeneity and drug resistance in cancer

Research Interests

1. Investigating the landscape of DNA repair and epigenetics mechanisms in cancer drug resistance.
2. Implications of small non-coding RNA in cancer pathophysiology
3. Tumor heterogeneity and biomarkers discovery

Experimental Models

1. Human carcinoma and normal cell line
2. Carcinoma patient tissue

Cancer, Epigenetic and DNA repair proteins flip-flop:

Our research project is delineating the mechanisms for development of resistance to variety of alkylating DNA damaging agents, which is one of the major challenges in effective breast cancer treatment. Although there has been tremendous progress in the prevention, detection, and treatment of cancer over the last fifty years, adequate therapy remains elusive due to a lack of clinical procedures for overcoming drug resistance in cancer. Scientific advances made in the last two decades have resulted in the identification of genes and molecular signaling mechanisms that contribute to drug resistance. This has resulted in a better understanding of the biology of breast cancer and as other cancer types and the way these cells acclimatize or undergo subtle molecular changes thereby protecting themselves from the cytotoxic effects of the alkylating anticancer drugs. Our lab is focused on DNA repair protein engaged with single strand break repair such as Base excision repair in breast carcinoma cells.

Small RNA seating on driver seat in cancer pathophysiology:

In recent times, several oncology signaling pathways have convergent effects on various types of cancer cell metabolism including breast cancer which contribute to tumor development. In 1931, German biochemist Otto Warburg revealed that cancer cells burn sugar (glycolysis) differently than normal cells, preferring to burn sugar over energy rich fats even when cellular oxygen conditions favor mitochondrial fat burning. Since the discovery of small and miRNAs in 1993, more than 1,500 human miRNAs and small RNA have been identified; few of them have been shown to regulate many cellular processes and pathways that are critical for breast carcinoma pathophysiology. Therefore, we are working on cell line-based study to test whether miRNA is playing as a driver in mitochondrial energetics in breast carcinoma. Further, several strategies to taming as well as knocking down these miRNAs in breast tumor would be one of fascinating approaches in medical sciences.

Tumor Microenvironment and Biomarkers Discovery:

Based on the current understanding that depicts the basis of origin, progression and drug response in breast and oral cancer, intra- and inter-tumor heterogeneity at both cellular and non-cellular levels are noticed. In other way, intra and inter-tumor heterogeneity within carcinomas poses limitations in the form of drug resistance, relapse, and high drug dose, failure of drug at inter-patient levels to achieve success in cancer therapeutic strategies including chemotherapy, radiotherapy, immunotherapy and precision guided therapy. Currently, our group is interested in metabolome heterogeneity and discovery of biomarkers using a one of patentable design of vertical tube gel electrophoresis (VTGE) to uncover biomarkers in biological fluids/materials such as nails, urine, saliva and serum.

DETAILS OF RESEARCH PROJECTS:

Sr No	Title of Research project	Investigators	Funding agency and reference number	Amount and Duration
1	Exploitation of abnormal DNA repair in cancer as a	Dr. Nilesh Kumar Sharma	Reference number: Registration No.	23 Lakhs, Dec. 2014-Nov.

	strategy for cancer therapy	(PI)	SERB/LS-1028/2013 SERB, DST, New Delhi,	2017, Completed
3	Mitochondrial marker screening of GDM and post-partum T2DM Indian patients using FACS and Confocal microscopy technique.	Dr. Nilesh Kumar Sharma (PI) and Dr. Charusheela Gore (MD)	Reference number: DPI/106(04)/2015	5 Lakhs, Dec 2015-Nov 2017, Ongoing
3	Investigating landscape of crosstalk between ATM kinase and DNA ligase III in breast carcinoma cells.	Dr. Nilesh K Sharma (PI)	DPU/06/11/2016	23.50 Lakhs, Ongoing (2015-2018)
4.	To Investigate Effects Of Non-Cellular Factors From One Carcinoma Upon Cellular Signaling Adaptation Of Another Carcinoma	Dr. Nilesh K Sharma (PI)	DPU/010/17/Cancer	14.00 Lakhs, Recommended and Approved, Ongoing (2017-2020)
6.	Development of infrastructure and facilities (including upgradation, modification etc.) for teaching and research	Prof. J. K. Pal (PI) Co-PIs: Prof. Neelu Nawani Dr. Nilesh K. Sharma Dr. Rajesh K. Gupta Dr. K V Swamy	SR/FST/LS-1/2017/70	Five Years (2018-2023) Total amount : 90 Lakhs

DETAILS OF JOURNAL REVIEWER/EDITORIAL MEMBER:

Sr. No	Name of Journal	Impact Factor	Role
1	BBA-Molecular Biology of Disease	(SCI-IF-5)	Reviewer
2	Cancer Gene Therapy	(SCI-IF-2)	Reviewer
3	Breast Cancer Research	(SCI-IF-5)	Reviewer
4	International Journal of Cancer	(SCI-IF-5)	Reviewer
5	Biomedicine and Pharmacotherapy	(SCI-IF-4)	Reviewer
6	Oncotarget	(SCI-IF-4.5)	Reviewer
7	Plos One	(SCI-IF-3.0)	Reviewer
8	Breast Cancer Research & Treatment	(SCI-IF-4.5)	Reviewer
9	International Journal of	(SCI-IF-4.8)	Reviewer

	Pharmaceutics		
10.	IUMB Life	(SCI-IF-4.0)	Reviewer
11.	Cancer Biotherapy and Radiopharmaceuticals	(SCI-IF-4.0)	Reviewer
12.	Cellular Oncology	(SCI-IF-5.0)	Reviewer

PROFESSIONAL RECOGNITION, AWARDS, FELLOWSHIPS RECEIVED:

- **Best Inspiring Innovation Award, 2019** for VTGE design and their applications in biomarkers discovery.
- **DPU Research Award, 2018**
- Young Investigator Travel Award by ICCB-2018, Hyderabad, CCMB
- **Young Investigators Meeting Travel Grant Award-2017**, sponsored by DBT-Welcome Trust, EMBO
- **DPU Young Researcher award 2015-2016.**
- Certified as **ELITE Health Researcher** in a Course “Health Research Fundamentals” by NIE, ICMR.
- Certified and completed the Bioethics Training course on behalf of UNESCO CHAIR BIOETHICS (Haifa).
- Certified as trainee in ISO 9001-2008.
- DST (SERB) Young Scientist Research award Recommended.
- Invited presentation for selected research proposal under “Young Innovative Investigator, DBT, New Delhi” (Feb, 2014).
- Research grant fellowship sponsored by **Department of Defense (DOD), USA (2012-2013)**
- Awarded first rank in UG courses and got recognition with fellowship award.
- **Qualified National Eligibility Test for UG and PG courses**
- Qualified for **Graduate Aptitude Test in Engineering (GATE) in year 2003.**
- **Qualified National Eligibility Test for Lectureship/JRF (2003)** and eligible for teaching post.
- Council of Scientific and Industrial Research (CSIR), Ministry of Human Resource Development awarded **Junior Research Fellowship (JRF) and Senior Research Fellowship (SRF).**
- Travel award from DST, New Delhi and University of Paris, Paris to present paper at International conference on Free radicals, health and human diseases, Paris, France, 2007.

RESEARCH PUBLICATIONS:

[A] JOURNAL PUBLICATIONS:

96. Sarode G, Sarode S, Gadail A, Gondivkar S, **Sharma NK**, Patil S. Are oral manifestations related to SARS-CoV-2 mediated hemolysis and anemia? Med Hypotheses. 2020. 110413. PMID: PMC7680608.
95. Sarode GS, Sarode SC, Sengupta N, Gadail AR, Gondivkar S, **Sharma NK**, Patil S. Clinical status determines the efficacy of salivary and nasopharyngeal samples for detection of SARS-CoV-2. Clin Oral Investig. 2020. 24(12):4661-4662. (**SCOPUS/PUBMED/SCI-IF-3.0 INDEXED**).
94. Sarode GS, Sarode SC, Gadail AR, Gondivkar S, **Sharma NK**, Patil S. 2020. Patients with interferon expressing oral pathology disorders are susceptible for COVID-19 infection. Medical Hypotheses. PUBMED ID: 7422813. 144: 110179. (**SCOPUS/PUBMED/SCI-IF-1.5 INDEXED**).

93. **Sharma NK**, Sarode SC, Sarode G, Patil S. Is a COVID-19 vaccine developed by nature already at work? *Med Hypotheses*. 2020. 145:110335. **PUBMED ID: 33059225. (SCOPUS/PUBMED/SCI-IF-1.5 INDEXED).**
92. Saranya Varadarajan, Balaji Madapusi, Sachin Sarode, Gargi Sarode, **Nilesh Kumar Sharma**, Shailesh Gondivkar, Amol Gadgil, Shankargouda Patil. 2020. EMMPRIN/BASIGIN as a biological modulator of oral cancer and COVID-19. A novel propositions. *Medical Hypotheses*. **PUBMED ID: 32673940**; 143: 110089. **(SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).**
91. Sarode SC, Sarode GS, Sengupta N, **Sharma NK**, Patil S. 2020. A Novel viewpoint on tobacco smoking and COVID-19. *J Contemp Dent Pract*. 2020. 21 (9):949-950. **(SCOPUS/PUBMED INDEXED).**
90. Sarode SC, Sarode GS, Sengupta N, **Sharma NK**, Patil S. 2020. Biological behavior of oral squamous cell carcinoma in the background of novel corona virus infection. *Oral Oncology*. **PUBMED ID: 32402653**. DOI: 10.1016/j.oraloncology.2020.104781. **(SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).**
89. **Sharma NK**, Sarode SC. 2020. Molecular landscape within lung epithelial tissue: Clues for reduced severity and comorbidities for COVID-19 and lung cancer. *Current Molecular Medicine*. BMS-CMM-2020-209. Accepted. **(SCOPUS/PUBMED/SCI-IF-2.0 INDEXED).**
88. Sarode SC, Sarode GS, Sengupta N, **Sharma NK**, Patil S. 2020. Adipocyte-tumor cell native encounter in oral squamous cell carcinoma. *Future Oncology*. doi: 10.2217/fon-2020-0399. **PUB MED ID: 32539566**. **(SCOPUS/PUBMED/SCI-IF-2.5 INDEXED).**
87. Mitruka M, Gore CR, Kumar A, Sarode SC, **Sharma NK***. 2020. Novel approach reveals lipid metabolite reduction in nails of breast cancer patients as potential biomarker. *MeDRxiv*. Manuscript ID: 015669. <https://doi.org/10.1101/2019.12.22.19015669>.
86. Sarode SC, Sarode GS, Sengupta N, **Sharma NK** Patil S. 2020. Calcified keratin pearls in oral squamous cell carcinoma. *Oral Oncology*. **PUBMED ID: 32276815**. 8:104681 **(SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).**
85. Sarode SC, Sarode GS, Sengupta N, **Sharma NK** Patil S. 2020. Perspective on muscle-tumor interaction in oral squamous cell carcinoma. *Oral Oncology*. **PUBMED ID: 32273154**. 6:104667. **(SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).**
84. **Sharma NK**, Sarode SC, Sarode GS, Patil S. 2020. Nail as a dump yard for drugs and their metabolites: blessing in disguise for nail cancer? **PUBMED ID: 32334295**. *Medical Hypotheses*. 142. 109744. **(SCOPUS/PUBMED/SCI-IF-1.5 INDEXED).**
83. Sarode SC, Sarode GS, **Sharma NK** Patil S. 2020. Fluorescent microscopy based novel methodology for identification of indistinct tumor-stroma junction. *Oral Oncology*. **PUBMED ID: 32094044**. 104:104605. **(SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).**
82. **Sharma NK***, Sarode SC, Sarode GS, Patil S, Pal JK. 2020. Dietary choices modulate colorectal cancer stem cell: A role of FXR nuclear receptor. *Nutrition & Cancer*. **PUBMED ID: 32674619**. *Nutrition and Cancer*. 16:1-8. **(SCOPUS/PUBMED/SCI-IF: 2.5 INDEXED).**
81. Ajay Kumar Raj, Jainish Kothari, Sethamma TN Sinchana, Kiran Lokhande, K. Venkateswara Swamy, **Nilesh Kumar Sharma***. 2020. Novel antiproliferative tripeptides inhibit AP-1 transcriptional complex. *International Journal of Cancer*. Under Review. *BioRxiv*. doi: <https://doi.org/10.1101/2020.05.08.083972> **(SCOPUS/PUBMED/SCI-IF: 5.0 INDEXED).**
80. Sarode GS, Sarode SC, Jain P, **Sharma NK***. et al. 2019. Dietary Modification as a Part of Prescription in Inflammatory Lesions of Oral Cavity: A Need of the Hour. *J Contemp Dent Pract* 2019. **PUBMED ID: 31892672**. 20(11):1239 1240. **(SCOPUS/PUBMED INDEXED).**
79. Mitruka M, Gore CR, Kumar A, Sarode SC, **Sharma NK***. 2020. Mitruka M, Gore CR, Kumar A, Sarode SC and Sharma NK. 2020. Undetectable Free Aromatic Amino Acids in Nails of Breast Carcinoma: Biomarker Discovery by a Novel Metabolite Purification VTGE System. *Front. Oncol*. **PUBMED ID: 32695662**. 10:908. doi: 10.3389/fonc.2020.0090879. **(SCOPUS/PUBMED/SCI-IF: 5.0 INDEXED).**

78. Sarode SC, **Sharma NK***, Sarode GS, Patil S, Atre S. 2020. Presenting symptoms and cancer stage: Do symptom locations matter? *Medical Hypotheses*. (SCOPUS/PUBMED/SCI-IF: 1.5 INDEXED). **PMID: 32062194**. DOI: 10.1016/j.mehy.2020.109616. 138: 109616.
77. **Sharma NK***, **Pal JK**. 2020. Metabolic ink lactate modulates epigenomic landscape: A concerted role of pro-tumor microenvironment and macroenvironment. *Current Molecular Medicine*. **PUBMED ID: 32436828**. doi: 10.2174/1566524020666200521075252. (SCOPUS/PUBMED/SCI-IF-3.5 INDEXED).
76. Ajay Kumar, Sheetal Patel, Devyani Bhatkar, Sarode SC. **Nilesh Kumar Sharma***. 2020. A novel method to detect intracellular metabolite alterations in MCF-7 cells by doxorubicin induced cell death. *Metabolomics*. In pRes. MEBO-D-20-00110R1. BioRxiv. doi: <https://doi.org/10.1101/812255>. (SCOPUS/PUBMED/SCI-IF-4.5 INDEXED).
75. Ajay Kumar, Sayantani Roychoudhary, Devyani Bhatkar. **Nilesh Kumar Sharma***. 2020. Molecular avenues in doxorubicin cancer therapy. *Future Oncology*. **PUBMED ID: 32253930**. 16(11):687-700 (SCOPUS/PUBMED/SCI-IF-2.5 INDEXED).
74. Sachin Sarode, Gargi S Sarode, Amol R Gadbaile, Shailesh Gondivkar, **Sharma NK**, Shankargouda Patil. 2019. Lysyl oxidase in oral cancer: friend or foe? *Medical Hypothesis*. 130:109283. **PUBMED ID: 31383339** (SCOPUS/PUBMED/WEB OF SCIENCE/SCI-IF 1.5 INDEXED).
73. **Sharma NK***, Sarode SC, Sarode GC, Patil S. 2019. Starvation in cancer cells: circulating arginine is good for cancer but bad for patients. *Expert Rev Anticancer Ther*. 19(6):455-459. **PUBMED ID: 31092062**. (SCOPUS/PUBMED/SCI-IF 2.5/SCIMAGO H Index-40).
72. Sarode GS, Sarode SC, Choudhary N, **Sharma NK**, Dharmarajan G, Patil S. 2019. Together consideration of microenvironment and tumor cells: Analysis of papers published in Oral Oncology. *Oral Oncol*. 2019. pii: S1368-8375(19)30194-0. **PUBMED ID: 31178339**. (SCOPUS/PUBMED/SCI-IF-4.5/SCIMAGO H Index: 120).
71. **Sharma NK**, Sarode SC, Sarode GS, Gadbaile AR, Gondivkar S, Patil S. Letter to the Editor. Macrophages Promote Growth of Squamous Cancer Independent of T cells. *Journal of Dental Research*. 98(12):1397. **PUBMED ID: 31483711**. (SCOPUS/PUBMED/SCI-IF 5.0/SCIMAGO H Index-120).
70. Nelli SR, **Sharma NK**, Kumar PM and Singh SS. 2019. The potential role of flavonoids in the control of oxidative stress for type II diabetes. *Int J Pharm Sci & Res*. 10(8): 3795-99. doi: 10.13040/IJPSR.0975-8232.10(8).3795-99. (SCOPUS/PUBMED Indexed).
69. **Nilesh Kumar Sharma***. 2019. "Transcriptional recording and chromatin remodeling events by CRISPR-Cas tool". *Current Chemical Biology*. 13(3):185-186. (SCOPUS/PUBMED/WOS/SCIMAGO H Index: 10).
68. Sarode SC*, **Sharma NK***, Sarode GS, Patil S. 2019. Oral premalignant lesions of smokers and non-smokers show similar carcinogenic pathways and outcomes. *Journal of Oral Pathology and Medicine*. **PUBMED ID: 31058379**. 48(6):507. (SCOPUS/PUBMED/SCI-IF-2.5/SCIMAGO H Index: 73). Accepted.
67. **Waghmode A, Ishita tendon, Nilesh Kumar Sharma***. 2019. Cancer stem cells equipped with powerful hedgehog signaling and better epigenetic memory: Avenues to look for cancer therapeutics. *Current Cancer Drug Targets*. 19(11): 877-884. **PUBMED ID: 31393247** (SCOPUS/PUBMED/SCI-IF-3/SCIMAGO H Index: 100).
66. **Nilesh Kumar Sharma***. 2019. RE: Letter to the Editor: "T cell stemness and dysfunction in tumors are triggered by a common mechanism" *Science Online*. <https://science.sciencemag.org/content/363/6434/eaau0135/tab-e-letters>
65. Sarode SC, Sarode GS, **Sharma NK***, Patil S. 2019. Recent trends in predictive biomarkers for determining malignant potential of Oral Potentially Malignant Disorders. *Oncology Reviews*. **PUBMED ID: 31565195**. DOI: 10.4081/oncol.2019.424. (SCOPUS/PUBMED/WOS/SCIMAGO H Index: 10).

64. Devyani Bhatkar, Sachin C. Sarode, Gargi S. Sarode, Shankargouda Patil, Nilesh Kumar Sharma. 2020. CRISPR-Cas9 genome editing tool: A narrow lane of cancer therapeutics with potential blockade. *Translational Cancer Research*. 9(4):3135-3141. (SCOPUS/PUBMED/SCI-IF-1.2/SCIMAGO H Index: 30).
63. Kumar, Swati Swami, Nilesh Kumar Sharma*. 2020. Distinct DNA metabolism and anti-proliferative effects of goat urine metabolites: An explanation for xeno-tumor heterogeneity. *Current Chemical Biology*. 2020. 14(1): 48-57. (SCOPUS/PUBMED H Index: 10).
62. Sharma NK*. 2019. Exosomal packaging of trans-activation response element (TAR) RNA by HIV-1 infected cells: A pro-malignancy message delivery to cancer cells. *Molecular biology Reports*. PMID: 30903574. 46(3):3607-3612. (SCOPUS/PUBMED/SCI-IF-2.5/SCIMAGO H Index: 210).
61. Green PD, Sharma NK, Santos JH. 2019. Telomerase impinges on the cellular response to oxidative stress through mitochondrial ROS-mediated regulation of autophagy. *International Journal of Molecular Sciences*. Int. J. Mol. Sci. 2019, 20(6), 1509. PMID: 30917518. (SCOPUS/PUBMED/SCI IF-4.5/SCIMAGO H Index: 80).
60. Tandon, Ishita, Pal, Roshni, Pal JK. Sharma NK. 2019. Extra-chromosomal circular nuclear DNA: An extra piece of evidence in tumor heterogeneity. *Future Science*. PMID: 31285839. 5(6):FSO390. (PUBMED/SCOPUS/Web of Science Indexed).
59. Sharma NK, Sarode GS, Sarode SC, Patil S. 2019. Vomocytosis by macrophages: A crucial event in the local niche of tumors. *Future Oncology*. PMID: 31038349. DOI: 10.2217/fon-2019-0078. SCOPUS/PUBMED/SCI-IF-2.5/SCIMAGO H Index: 50).
58. Mamta Shekhawat, Devashree Jahagirdar, Sunny Yadav, Nilesh Kumar Sharma*. 2019. Induction of apoptosis in HeLa by corn small RNAs. *Nutrition and Cancer*. 20:1-11. DOI:10.1080/01635581.2018.1526307. PMID: 30785339. (SCOPUS/PUBMED/SCI –IF 2.2/ SCIMAGO H-Index: 109).
57. Nilesh Kumar Sharma. 2019. A connecting switch among aging, diabetes and tumor: avenue leading to cancer therapeutics. *Current Cancer Therapy Reviews*. 15:170-171. (SCOPUS/ ESCI Indexed SCIMAGO H-Index: 11).
56. Sunny Yadav, Devashree Jahagirdar, Mamta Shekhawat, Nilesh Kumar Sharma*. 2019. Induction of S-phase cell cycle arrest and apoptosis in HeLa cells by small RNAs fraction of *Solanum tuberosum* L. *MicroRNA*. 8(3):180-188. PMID: 30569881. (BMS-MicroRNA-2018-25). (SCOPUS INDEXED/WOS/SCIMAGO H Index-10).
55. Nilesh Kumar Sharma*, Sachin C Sarode*, Gargi S Sarode, Shankargouda Patil. 2018. Letter to the Editor: “Impact of Age on Disease Progression and Microenvironment in Oral Cancer”. *Journal of Dental Research*. 97(13):1519. PUBMED ID: 30280945. (SCOPUS/PUBMED/SCI-IF-5.3/SCI-MAGO H Index: 153).
54. Himadri Patel, Devashree Jahagirdar, Nilesh Kumar Sharma*. 2018. Induction of apoptotic death and cell cycle arrest in HeLa by extracellular factors of breast carcinoma. *Asian Pacific Journal of Cancer Prevention*. 19(12): 3307-3316. PMID: 30583335. (SCOPUS/PUBMED/SCIE INDEXED/SCI-MAGO H Index: 59).
53. Sachin C Sarode*, Nilesh Kumar Sharma*, Gargi Sarode, Shankargouda Patil, Pritish Nilendu. 2018. Survival strategies of cancerous cells: a novel perspective. *Future Oncology*. PMID: 30191739. 14(26): 2679-2682. (SCOPUS/PUBMED/SCI-IF-2.5/SCIMAGO H-Index-57).
52. Sudharshan Reddy Nelli, Nilesh Kumar Sharma*, Manoj Kumar P, Surya S Singh*. 2018. Evaluation of oxidative stress and antioxidant status between Type II diabetes patients and healthy populations. *Asian Journal of Pharmaceutical and Clinical Research*. 11(9):264-267. DOI: <http://dx.doi.org/10.22159/ajpcr.2018.v11i9.25998>. SCOPUS INDEXED (SCI-MAGO- H Index-23).
51. Nilendu P, Kumar A, Kumar A, Pal JK, Sharma NK*. 2018. Breast cancer stem cells as last soldiers eluding therapeutic burn: A hard nut to crack. *International Journal of Cancer*. 142(1):7-17. PUBMED ID: 28722143. (SCOPUS/PUBMED/SCI-IF-7.36/SCIMAGO H Index: 206).

50. Ishita Tandon, **Nilesh Kumar Sharma*** 2019. Macrophage flipping from foe to friend: A matter of interest in breast carcinoma heterogeneity driving tumor hallmarks. *Current Cancer Drug targets*. **PUBMEDID: 29952260**. 19(3):189-198. (SCOPUS/PUBMED/SCI-IF 3.0/SCIMAGO H Index-83).
49. Pritish Nilendu, Sachin C. Sarode, Devashree Jahagirdar, Ishita Tandon, Shankargouda Patil, Gargi S. Sarode, Jayanta K. Pal, **Nilesh Kumar Sharma***. 2018. Mutual concessions and compromises between stromal cells and cancer cells: driving tumor development and drug resistance. *Cellular Oncology*. DOI: 10.1007/s13402-018-0388-2. 41(4):353-367. **PUBMEDID: 30027403** (SCOPUS/PUBMED/SCI-IF-5/SCIMAGO H Index-26).
48. Aayushi Jain, Devashree Jahagirdar, **Nilesh Kumar Sharma***. 2018. Low dose of cisplatin combined with blockade of DNA repair proteins can show better effects in HeLa. *Oncomedicine*. 3: 59-66. doi:10.7150/oncm.2585. (PUBMED Indexed).
47. Azad Kumar, **Sharma NK***. 2018. Differential DNA damaging effects of genotoxic agents from chewing tobacco and gutka. *Hematology and Medical Oncology*. 3(1):1-3. DOI: 10.15761/HMO.1000151. (PUBMED Indexed).
46. Jahagirdar D, Purohit S, **Sharma NK***. 2018. Combinatorial Use of DNA Ligase Inhibitor L189 and Temozolomide Potentiates Cell Growth Arrest in HeLa. *Current Cancer Therapy Reviews*. 14:1-7. 10.2174/1573394714666180216150332. (SCOPUS/ ESCI INDEXED/SCIMAGO H Index:11).
45. Himadri Patel, Pritish Nilendu, Devashree Jahagirdar, Jayanta K. Pal, **Sharma NK***. 2018. Modulating non-cellular components of microenvironmental heterogeneity: A masterstroke in tumor therapeutics. *Cancer Biology & Therapy*. 19(1):3-12. **PUBMEDID: 29219656**. (SCOPUS/PUBMED/SCI-IF-3.25/SCIMAGO H Index:96).
44. Aayushi J, Jahagirdar D. Pritish Nilendu, **Sharma NK***. 2017. Molecular approaches to potentiate cisplatin responsiveness in carcinoma therapeutics. *Expert Reviews in Anticancer Therapy*. 17(9):815-825. **PMID: 28705091**. (SCOPUS/PUBMED/SCI-IF-2.21/SCIMAGO H Index: 58).
43. **Nilesh Kumar Sharma***. 2018. Letter To Editor: Vomocytosis, a tool in the hand of macrophage to deal with burdened live pathogens. *Scienceadvances*. <http://advances.sciencemag.org/content/3/8/e1700898/tab-e-letters>.
42. Pritish Nilendu, **Sharma NK***. 2017. Epigenomic hard drive (EHD) imprinting: A hidden code beyond the biological death of a cancer patient. *Journal of Cancer Prevention*. 22:211-218. <https://doi.org/10.15430/JCP.2017.22.4>. **PUBMEDID: 29302578**. (SCOPUS/PUBMED Indexed/H Index: 40).
41. Gargi S Sarode, Nikunj Maniyar, **Nilesh K Sharma**, Shankargouda Patil, Sarode SC. 2017. Carcinogenesis-relevant biological events in the pathophysiology of the efferocytosis phenomenon. *Oncology Reviews*. 11(343): 87-93. **PMID: 29285321**. (SCOPUS/PUBMED Indexed/SCIMAGO H Index: 10).
40. Nilendu P, Roychoudhary S, Deshpande K, **Sharma NK***. 2017. Therapeutic peptide mimetics looking for a turn to block aberrant players of malignancy. *Current Cancer Therapy Reviews*. 2017, 13, 1-18. Doi. 10.2174/1573394713666170615115259. (SCOPUS INDEXED/ESCI/SCIMAGO H Index:11).
39. Aayushi Jain, Sunny Yadav, Mohsein Beig, Shruti Purohit, **Sharma NK***. 2017. Base excision repair manipulation in breast carcinoma: A prospective avenue to potentiate genome insulting approach. *Oncomedicine*. 2017; 2: 42-51. DOI:10.7150/oncm.16758. PUBMED Indexed.
38. Sunny Yadav, Mamta Shekhawat, Devashree Jahagirdar, **Sharma NK***. 2017. Natural and artificial small RNAs: A promising avenue of nucleic acid therapeutics in cancer. *Cancer Biology & Medicine*. 14(3): 242-253. **PUBMEDID: 28884041**. (SCOPUS/PUBMED/SCI-IF-4.1/SCIMAGO H Index-25).

37. Kumar A, Bhatkar D, Purohit S, Jahagirdar D, **Sharma NK***. 2017. Non-homologous end joining inhibitor SCR-7 to exacerbate low dose doxorubicin cytotoxicity in HeLa. *Journal of Cancer Prevention*. 2017. 22(1):47-54. **PUBMEDID: 28382286. (SCOPUS/PUBMED/H Index:35).**
36. Kumar A, Nilendu P, Azad Kumar, **Sharma NK***. 2017. Epigenetic perturbation driving asleep telomerase reverse transcriptase: possible therapeutic avenues in carcinoma. *Tumor Biology*. 39(3):1-9. **PUBMEDID: 28347254. DOI: 10.1177/1010428317695951. (SCOPUS/PUBMED/SCI-IF-3.0/SCI MAGO H Index: 65).**
35. Shruti Purohit, Devashree J, Azad K, **Sharma NK***. 2019. In vitro single-strand DNA damage and cancer cell cytotoxicity effects of Temozolomide. *Cancer Medicine*. PUBMED ID: 31568693. doi: 10.1002/cam4.786. **(PUBMED Indexed). (SCOPUS/PUBMED/SCI-IF-3.4/SCI MAGO H Index: 65).**
34. Ajay Kumar, Sarode SC*, Gargi S Sarode, Barnali Majumdar, Shankargouda Patil, **Sharma NK***. 2017. Beyond gene dictation in oral squamous cell carcinoma progression and its therapeutic implications. *Translational Research In Oral Oncology*. 2: 1–14. DOI: 10.1177/2057178X17701463.
33. Devashree J, Shruti Purohit, Aayushi Jain, **Sharma NK***. 2016. Export of short RNAs: A bridge between breast carcinoma and their neighboring cells". *Front. Oncol*. 6:147. doi: 10.3389/fonc.2016.00147. **PUBMED ID: 27379209. (SCOPUS/PUBMED/SCI-IF-4.5/SCIMAGO H Index: 50).**
32. Shruti Purohit, Devashree Jahagirdar, Azad Kumar, **Sharma NK***. 2016. Potential of taming microRNA on driver seat to control mitochondrial horses in breast carcinoma. *MicroRNA*. 5(3): 158-166. PUBMED ID: 27464995. **(SCOPUS/PUBMED/SCIE INDEXED/SCIMAGO H Index:10).**
31. Bhatkar D, Kumar J, Purohit S, Jahagirdar D, **Sharma NK***. 2016. ATM kinase inhibitor KU-55933 contribution in cisplatin mediated HeLa proliferation. *International Journal of Pharmacology and Toxicology*. 4(2): 201-207. **DOI: 10.14419/ijpt.v4i2.6644.**
30. Azad Kumar, Shruti Purohit, **Sharma NK***. 2016. Aberrant DNA double-strand break repair threads in breast carcinoma: Orchestrating genomic insults survival. *Journal of Cancer Prevention*. 21(4):227-234. **PUBMED ID: 28053956. (SCOPUS/PUBMED Indexed/H Index: 35).**
29. Sharma S, Verma HN and **Sharma NK***. 2014. Cationic bioactive peptide from the seeds of *Benincasa hispida*. *International Journal of peptides*. <http://dx.doi.org/10.1155/2014/156060>. PMID: 24834076. **(SCOPUS/PUBMED/SCIE INDEXED).**
28. **Sharma NK**, Kumar A, Kumar A, Tokar AJ, Waalkes M, Bortner CD, Williams CJ, Mason RP and Sinha BK. 2015. Nitric Oxide Down-Regulates Topoisomerase I and Induces Camptothecin Resistance in Human Breast MCF-7 Tumor Cells. *Plos One*. DOI:10.1371/journal.pone.0141897 November 5, 2015. 1-20. PUBMED ID: 26540186. **(SCOPUS/PUBMED/SCI-IF-3.0).**
27. **Sharma NK**, Lebedeva M , Thomas T, Kovalenko O, Stumpf J, Shadel G and Santos J. 2014. Intrinsic DNA ligase III and mitochondrial DNA repair defects in Ataxia Telangiectasia. *DNA Repair*. 13: 22-31. PUBMED ID: 24342190. **(SCOPUS/PUBMED/SCI-IF-4.5).**
26. **Sharma NK**, Reyes A, Green P, Caron MJ, Gordon DM, Hunter S, Holt IJ and Santos JA. 2012. Human telomerase works in mitochondria as an hTR independent reverse transcriptase. *Nucleic Acids Research*. 40(2):712-725. PMID: 21937513. **(SCOPUS/PUBMED/SCI-IF-11.56).**
25. Green PD, **Sharma NK**, Thomas AP, Bonini M, Santos JA. 2012. Telomerase Regulates the Cellular Response to Oxidative Stress Via Mitochondrial ROS. *Free Radical Biology and Medicine*. 53, S50. **(SCOPUS/PUBMED/SCI-IF-6.0).**
24. Singh RK, **Sharma NK**, R. Prasad and Udai P. Singh. 2008. DNA cleavage by Cu(II-GlyAibHis), a tripeptide complex based on ATCUN motif. *Protein and Peptide letters*. 15(1):9-13. PMID: 18221007. **(SCOPUS/PUBMED/SCI-IF-1.2, SCIMAGO-H Index-50).**

23. Choudhary, R.R., H.N. Verma and **Sharma NK**, 2013. Antioxidant and dehalogenase activity of *Lagenaria sciceraria* seed protein fraction. J. Plant Sci. Res., 29: 145-158. (**EBSCO/ICI Indexed**).
22. **Sharma NK** and Prasad R. 2008. Oxidative protein damage and their inhibition by phenolic acid antioxidants from *Euphorbia hirta* leaves. Journal of Biotechnology. 136S:S717. (**SCOPUS/PUBMED/SCI-IF-2.6**).
21. **Sharma NK**, Dey S, Prasad R. 2007. *In vitro* antioxidant potential evaluation of *Euphorbia hirta* L. plant. Pharmacology Online 1: 91-98. **IMPACT FACTOR: 0.5. (SCOPUS INDEXED, SCIMAGO-H Index-20)**.

PS: * As Corresponding author

{B}. PUBLICATIONS (PATENT)

20. **Sharma NK**. Ajay Kumar, Amresh Kumar Yadav. 2018. Method for genotoxic and apoptotic compositions of cow urine DMSO fraction towards breast carcinoma. Indian Patent Application No: 201821025084 (2018). Date of filing. 05/07/2018. **Published**. The Patent Office Journal No. 20/2019 Dated 17/05/2019. Page No. 20487.
19. **Sharma NK**. Ajay Kumar, Asawari Waghmode. 2019. Design of vertical tube electrophoretic system and method to fractionate small molecular weight compounds using polyacrylamide gel matrix. Date of Publication: 01/03/2019. (Patent Application Number no: INA 201921000760). Publication Type INA, The patent official Journal No- 19/2018, Page no-9035. **Published**.
18. **Sharma NK**. Ajay Kumar. 2018. "Method of using goat urine DMSO fraction as anti-proliferative and apoptotic cell death compounds against cancer cells and composition thereof". Date of filing 21/12/2018 (Ref. No: 201821048505). The Patent Office Journal No. 18/2019 Dated 03/05/2019 18276. **Published**.
17. **Dr. Nilesh Kumar Sharma**, Dr. Sachin C. Sarode, Ms. Roshni Pal, Mr. Ajay Kumar Raj. 2019. "A method of urine metabolite profiling by combining vertical tube gel electrophoresis and LC-HR-MS for the detection of oral cancer". Date of filing 2019/05/29. (Ref. No: 201921021395). **Published. Journal Number: 49/2020 Date:04/12/2020**.
16. **Dr. Nilesh Kumar Sharma**, Dr. Sachin C. Sarode, Mr. Manmohan Mitruka. "A method to fractionate and analyze metabolome and mineralome from nail materials of OSCC for biomarker discovery". Date of filing 2019/05/04 (Ref. No: 201921017907). **Published. Journal Number: 45/2020 Date:06/11/2020**.
15. **Dr. Nilesh Kumar Sharma**, Ajay Kumar, Hritik Chandore. 2020. Methods for novel tripeptides compositions from bovine serum and their binding as agonists of beta2-adrenergic G protein-coupled receptor. Indian Patent Application number: 202021052558. Date of Filing. 02/12/2020.

{C}. PUBLICATIONS: (BOOK/BOOK Chapter, Full Length Conference Proceedings)

14. Ajay Kumar, Jainish Kothari, Devyani Bhatkar, Manmohan Mitruka, Roshni Pal, Sachin C. Sarode, **Nilesh Kumar Sharma***. Detection of urinary metabolites of metabolic pathway disorders by using VTGE and LC-HR-MS techniques. DPU's conference: Interdisciplinary Research in Health. August 27th 2019. Conference proceeding paper. doi: <https://doi.org/10.1101/814970>. bioRxiv 814970.
13. Azad K, Devashree J, Shruti Purohit, **Sharma NK***. 2018. "Epigenetic signature in breast carcinoma, A hidden language to dictate against genomic insults" ISBN NO. 1522530851, 9781522530855. Emerging developments and practices in oncology. El Naqa, Issam (University of Michigan, USA), editor, Country of Publication: United States. Publisher: Hershey PA : Medical Information Science Reference. PUBMED ID:101702574 [Book]. **DOI: 10.4018/978-1-5225-3085-5**.
12. **Sharma NK**, Dey Sreela, R Prasad. 2008. A chapter "Antioxidants from medicinal plants and their impact on human health" in book "In Recent Advances in Plant Biotechnology and Its Applications"

[D] LIST OF PUBLICATION/ACCESSION IN BIOINFORMATIC DATABASE

11. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Cys-Met-Gln". IUPAC Name: L-cysteinyl-L-methionyl-L-glutamine. Date of Annotation: 06/08/2019. ChEBI ID and Accession No: CHEBI:144427. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A14427&conversationContext=8>.
10. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Lys-Glu-Thr". IUPAC Name: IUPAC Name : L-lysyl-L- α -glutamyl-L-threonine. Date of Annotation: 06/08/2019. CHEBI ID and Accession No:144459 Lys-Glu-Thr. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144459&conversationContext=3>.
9. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Lys-Glu-Glu.". IUPAC Name: L-lysyl-L- α -glutamyl-L-glutamic acid. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144461. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144461&conversationContext=3>.
8. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Gly-Ala-Ala". IUPAC Name: glycyl-L-alanyl-L-alanine. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144460. Source: European Bioinformatics Institute (EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144460&conversationContext=3>.
7. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Gln-Cys-Cys". IUPAC Name: glutamyl-L-cystenyl-L-cysteine. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144458. Source: European Bioinformatics Institute (EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144458&conversationContext=2>.
6. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Gln-Lys-Arg". IUPAC Name: L-glutamyl-L-lysyl-L-arginine. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144723. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144723&conversationContext=3>. <https://doi.org/10.13140/RG.2.2.29703.75689>.
5. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Lys-Ser-Trp". IUPAC Name: L-lysyl-L-seryl-L-tryptophan, CHEBI:144474. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144474. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144474&conversationContext=3>.
4. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Phe-Arg-Thr". IUPAC Name: L-phenylalanyl-L-arginyl-L-threonine, CHEBI:144556. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144556. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144556&conversationContext=3>.
3. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence "Glu-Glu-Arg". IUPAC Name: L- α -glutamyl-L- α -glutamyl-L-arginine, CHEBI:144557. Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144557. Source: European Bioinformatics Institute(EMBL EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144557&conversationContext=3>.

2. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence “Gly-Arg-Pro”. IUPAC Name: glycyl-L-arginyl-L-proline, Date of Annotation: 08/08/2019. ChEBI ID and Accession No: CHEBI:144473. Source: European Bioinformatics Institute(EMBL/EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144473&conversationContext=3>.
1. Jainish Kothari, Ajay Kumar, **Sharma NK***. 2019. A submission of Tripeptide metabolite sequence “Ser-Trp-Lys”. IUPAC Name: L-seryl-L-tryptophyl-L-lysine, Date of Annotation: 20/09/2019. ChEBI ID and Accession No: CHEBI:144904. Source: European Bioinformatics Institute(EMBL/EBI). <https://www.ebi.ac.uk/chebi/searchId.do?chebiId=CHEBI%3A144904&conversationContext=3>.

PAPER PRESENTATION:

1. Ajay Kumar Raj, **Sharma NK***. Goat urine DMSO fraction enriched metabolites serve as a potential anticancer drug option. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
2. Rushikesh Patel, **Sharma NK***. A study on salivary and urinary metabolite biomarkers in carcinoma assisted by VTGE method. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
3. Hritik Chandore, **Sharma NK***. A simple method to determine in vitro cancer cell growth arrest and apoptotic cell death by using VTGE based intracellular and extracellular metabolite profiling. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
4. Anwasha Dutta, **Sharma NK***. Scope of non-traditional biological samples such as nails and saliva in cancer biomarker discovery. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
5. Jainish Kothari, **Sharma NK***. Study of potential tripeptide mimetic targeting on c-fos c-jun DNA complex. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
6. Swati Swami, **Sharma NK***. Anti-cancer pharmaceutical compositions derived from cow urine show breast cancer specific apoptosis and anti-proliferative effects. International Conference On Disease Biology: Diagnostic and Therapeutic, Organized by Savitribai Phule Pune University, Pune-411007, Maharashtra, India. Date 4th To 6th March, 2020.
7. Ajay Kumar, Sheetal Patel, Manmohan Mitraka, Rioshni Pal, Devyani Bhatkar, **Nilesh Kumar Sharma***. A novel and specifically designed VTGE method to detect intracellular and extracellular metabolite alterations. 5th ICTR. 7th To 9th November. 2019. NCCS, Pune
8. Sumitra Choudhary, Ajay Kumar, Asawari Waghmode, Seethama TN, **Nilesh Kumar Sharma***. A study on VTGE based metabolite profiling of MCF-7 cells treated by goat urine DMSO fraction. Technical abstract poster presentation. National Symposium On Recent Advances on Modern Biology and Biotechnology. 14-16th March, 2019. Dr. D. Y. Patil Vidyapeeth, Pune. Best Poster Award and Best Innovation Award.
9. Sheetal Patel, Ajay Kumar, Asawari Waghmode, **Nilesh Kumar Sharma***. A simple method to determine in vitro cancer drug potential and cancer biomarkers by using VTGE based metabolite profiling. Technical abstract poster presentation. National Symposium On Recent Advances on Modern Biology and Biotechnology. 14-16th March, 2019. Dr. D. Y. Patil Vidyapeeth, Pune. Best Poster Award and Best Innovation Award.
10. Roshni Pal, Ajay Kumar, Sachin C. Sarode, **Nilesh Kumar Sharma***. Development of early detection biomarker assay for oral carcinoma. Technical abstract poster presentation. National

Symposium On Recent Advances on Modern Biology and Biotechnology. 14-16th March, 2019. Dr. D. Y. Patil Vidyapeeth, Pune.

11. **Nilesh Kumar Sharma***. Complexity and heterogeneity of tumors: therapeutic and prognostic avenues emerge from inter- and xeno-heterogeneity. Oral Presentation. National Symposium On Recent Advances on Modern Biology and Biotechnology. 14-16th March, 2019. Dr. D. Y. Patil Vidyapeeth, Pune.
12. Manmohan Mitruka, **Nilesh Kumar Sharma***. Scope of non-traditional biological samples such saliva and nail in cancer biomarkers discovery. Poster Technical abstract presented. National Symposium On Recent Advances on Modern Biology and Biotechnology. 14-16th March, 2019. Dr. D. Y. Patil Vidyapeeth, Pune.
13. Asawari Waghmode, Shrutika Kavali, Ajay Kumar, Manmohan Mitruka, **Nilesh Kumar Sharma***. A design of vertical tube gel electrophoresis system and its application in low molecular weight markers analysis from biological samples. CMBC-2019 National conference on Cellular and Molecular Basis of Cancer: Molecules to Mechanics. 07/02/2019 - 09/02/2019. VENU: Department of Commerce, (auditorium) SSPU, Pune.
14. Prajakta Belekar, Roshni Pal, IshitaTandonn, Mamta Shekhawat, Devashree Jahagirdar, Sunny Yadav, **Nilesh Kumar Sharma***. Effects of corn-derived small RNAs as pro-apoptotic agents upon cancer cells". CMBC-2019 National conference on Cellular and Molecular Basis of Cancer: Molecules to Mechanics. 07/02/2019 - 09/02/2019. VENU: Department of Commerce, (auditorium) SSPU, Pune.
15. Seethamma T N, Ajay Kumar, Swati Swami, **Nilesh Kumar Sharma**. Short-chain fatty acids from goat urine: A source of apoptotic and anti-proliferative agents". CMBC-2019 National conference on Cellular and Molecular Basis of Cancer: Molecules to Mechanics. 07/02/2019 - 09/02/2019. VENU: Department of Commerce, (auditorium) SSPU, Pune.
16. Ajay Kumar, Vidhi Upadhyay, Amersh Kumar Yadav, **Nilesh Kumar Sharma**. Anticancer pharmaceutical compositions derived from cow urine show breast cancer-specific apoptotic and anti-proliferative effects. CMBC-2019 National conference on Cellular and Molecular Basis of Cancer: Molecules to Mechanics. 07/02/2019 - 09/02/2019. VENU: Department of Commerce, (auditorium) SSPU, Pune.
17. Devashree Jahagirdar, Charusheela R. Gore, Himadri Patel, Kunjal. M. Karia, Ishita Tandon, **Nilesh Kumar Sharma. 2018**. Nextgen genomics, biology and Bioinformatics and technologies conference. Sep. 30 To Oct. 2, 2018. Jaipur, India. Page no 55-56. Poster no-040.
18. **Sharma NK. 2018**. Anti-cancer pharmaceutical compositions of cow urine towards breast cancer and goat urine upon colon cancer: Clues are in their gut microbiotas. National Biomedical Research Competition 2018 at AIIMS, Rishikesh, October. 15, 2018.
19. **Sharma NK**. Existence of chemical languages from dying cancer cells to surviving cancer cells: Live long cellular friend. 7TH FOCUSED MEETING ON CELL SIGNALLING 16 – 17 April 2018. East Midlands Conference Centre, The University of Nottingham, Nottingham, UK.
20. Devashree Jahagirdar1, Mamta Shekhawat1, Sunny Yadav1, Himadri Patel1, Ishita Tandon1, **Nilesh Kumar Sharma. 2018**. Cross-cancer cell types and cross-kingdom interference could serve as an avenue in cancer therapeutics. International Congress On Cell Biology-2018. Organized by CCMB, Hyderabad, India (27th Jan-31st Jan. 2018).
21. **Sharma NK** and Pritish Nilendu. Existence of epigenomic hard drive (EHD) imprinting: A black box beyond the biological death of a tumor patient. International Conference on Cancer Epigenetics and Biomarkers. October 26-28, 2017 Osaka, Japan. Arch Can Res. 2017, 5:4. DOI: 10.21767/2254-6081-C1-003.
22. **Sharma NK***. 2017. Tumor heterogeneity driven by sharing genetic and signaling code between microbiota and breast carcinoma. Proceedings on International Conference on Oncology and Cancer Therapeutics. October 30- November 01, 2017 | Chicago, USA. J Med Oncol Ther. 2(3). 47.
23. **Sharma NK*** and Pritish Nilendu. An evidence of black box within cancer patient: epigenomic hard drive (EHD) imprinting. J Cancer Sci Ther 2017, 9:7 (Suppl). DOI: 10.4172/1948-5956-C1-109.

24. **Sharma NK***, Himadri Patel and Devashree Jahagirdar. Modulation of HeLa growth and proliferation by breast carcinoma secreted non-cellular microenvironment. 2nd International Congress on Contemporary Issues in Women Cancers & Gynecologic Oncology. August 29-30, 2017 | London, UK. Gynecol Obstet (Sunnyvale). 2017, 7:9 (Suppl). DOI: 10.4172/2161-0932-C1-019.
25. Shekhawat S, Devashree, Yadav S, **Nilesh Kumar Sharma***. Potential Of Corn Small RNAs To Show Apoptosis In Cancer Cell. I4CM-2017. 07 Sept.-07 Sept. 2017. International Conference of Current Cancer Medicine. Warsaw, Poland. <http://i4cm.net/potential-of-corn-small-rnas-to-show-apoptosis-in-cancer-cell/>
26. **Nilesh Kumar Sharma***. Genetic and epigenetic clues: A promising insights to tame carcinoma drug resistance. Annual Summit on Cell Signaling and Cancer Therapy. Chicago, USA. September 27-28, 2017. J Stem Cell Res Ther. DOI: 10.4172/2157-7633-C1-030. <https://d2cax41o7ahm5l.cloudfront.net/cs/pdfs/cell-signaling-2017-11303-tentative-program.pdf>.
27. **Nilesh Kumar Sharma***. Molecular drivers in epigenetic landscape changes to DNA repair abilities in carcinoma triggering and resistance. 9th Young Investigators meeting, 2017. Organized by BIT, Goa and sponsored from Welcome trust, UK-INDIA, EMBO AND DBT, New Delhi.06-08, March, 2017.
28. Shruti Purohit, Devashree J, Azad, Ayushi, **Nilesh Kumar Sharma***. 2015. Assessment of temozolomide to generate single strand break during in vitro DNA damage and cancer cell cytotoxicity assay. National Centre for Cell Science, Pune (International Conference on Cancer Research: New Horizons) (19-21st November 2015).
29. Shruti Purohit, Devashree J, Azad, **Nilesh Kumar Sharma***. 2015. Potentials of taming MicroRNA on driver seat to control mitochondrial horses in breast tumor. One day workshop on insights in biology. Jointly organized by Maharashtra Academy of Sciences and CSIR-National Chemical LaboratoryOrganized at NCL, Pune, India. Oct 26. 2015.
30. Devashree Jahagirdar, Shruti P., Ayushi, **Nilesh Kumar Sharma***. 2015. Communication between Breast tumor cells and neighboring cells via packaging and shipping of short RNA. . One day workshop on insights in biology. Jointly organized by Maharashtra Academy of Sciences and CSIR-National Chemical LaboratoryOrganized at NCL, Pune, India. Oct 26. 2015.
31. **Sharma NK***. 2014. Development of mitochondria targeted nanocarrier conjugated drugs against breast cancer. Global Cancer Conference & Medicare Summit. September 15-17, 2014 Hyderabad International Convention Centre, India.
32. **Sharma NK**, Leibideva M, Thomas T, Shadel G, Santos J. 2013. Intrinsic DNA ligase III and mitochondrial DNA repair defects in Ataxia Telangiectasia. NHLBI, Mitochondria, Mitochondrial genetics and Human diseases Symposium, at NIH, NHLBI, Bathesda, Maryland. 6-7 May, 2013.
33. **Sharma NK**, Thomas T, Santos J. 2012. Role of ATM kinase in mitochondrial DNA metabolism. Mitochondria, Signals and Homeostasis, June 27-29th, 2012; Michigan State University, East Lansing, MI.
34. **Sharma NK**, Lebedeva M , Thomas T, Kovalenko O, Stumpf J, Shadel G and Santos J. 2012. Role of ATM kinase in mitochondrial DNA repair. Gordon Research Conference on Mutagenesis, August 19-24, 2012, Salve Regina University, Newport, RI.
35. **Sharma NK**, Green P, Caron MJ, Gordon DM, Hunter S and Santos JA. 2011. The role of telomerase in mitochondrial DNA metabolism. Paper presentation at European Meeting on Mitochondrial Pathology. EUROMET 8. Zaragoza. Spain. June, 20-23. 2011.
36. **Sharma NK**, Green P, Caron MJ, Gordon DM, Hunter S and Santos JA. 2011. Unveiling the function of telomerase in mitochondria. Oral presentation at Cold Spring Harbor laboratory, New York, USA. International Telomere and Telomerase meetings 3-7May, 2011.
37. **Sharma NK**, Prasad R. 2008. Hydroxy cinnamic acid derivatives from Euphorbia hirta and their protective interaction with protein. Biochemistry of cell regulation: 33rd FEBS Congress & 11th IUBMB Conference. June 28th –July 3rd 2008. Athens, Greece. Poster Presentation.

38. **Sharma NK**, Prasad R. 2008. Synergistic interaction of phenolic acid constituents from Euphorbia hirta leaves and their protective on oxidative injury to protein. Oxygen Club California World Congress 2008. Santa Barbara, California USA. P-35.
39. **Sharma NK**, Prasad R. 2008. Saponin glycosides as natural antioxidant from Aegle marmelos and their protective role in oxidative damage to protein. Bioanalysis in Oxidative stress. Biochemical Society Focused meetings. Biochemical Society Transaction. 200836(5).P-36. <https://www.biochemistry.org/meetings/abstracts/SA075/SA075P036.pdf>.

DETAILS OF Ph.D/P.G./UG THESIS SUPERVISED:

Sl. No.	Title of Thesis	Institute	Name of student[s]	Co-Supervisor[s], if any	Year
1.	Study of bioactive peptide from Benincasa hispida seed	Jaipur National University, Jaipur	Sunayna Sharma (Ph.D. completed)	Guide: Prof. H. N Verma Co-Guide: Dr. Nilesh Kumar Sharma	2013 (Completed)
2.	The role of flavonoids to alleviate oxidative stress in diabetes mellitus patients	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Mr. Sudhasan Reddy (Ph.D. ongoing)	Guide: Dr. Nilesh Kumar Sharma Co-Guide: Prof. Surya Singh	Final Thesis Submitted, 2020
3	Study on anti-cancer potentials of metabolites from cow urine	Dr. DY patil Biotechnology Institute, Dr. D Y Patil Vidyapeeth, Pune	Mr. Ajay Kumar (Ph.D. ongoing)	Guide: Dr. Nilesh Kumar Sharma	Ongoing (Date of Registration: March, 2019)
4.	Non-invasive and non-conventional biological fluids/materials as potential sources of metabolite biomarkers in oral cancer.	Dr. DY patil Biotechnology Institute, Dr. D Y Patil Vidyapeeth, Pune	Ms. Devyani Bhatkar (Ph.D.) Ongoing), UGC-CSIR-JRF Fellow)	Guide: Dr. Nilesh Kumar Sharma Co-Guide: Prof. Sachin C Sarode	Ongoing (Date of Registration: Feb, 2020)
5	Comparative evaluation of different dental tissues for creation of human tooth DNA map & degradation profile/chart	Dr. DY patil Biotechnology Institute, Dr. D Y Patil Vidyapeeth, Pune	Dr. Rohan Ashok Gawali,	Guide: Prof. Nilesh Kumar Sharma Co-Guide: Dr. Bhargav C. Patel, Sr. Assistant Professor, School of Forensic Science, National Forensic	Ongoing (Date of Registration: Feb, 2020)

				Sciences University, Gandhinagar, Gujarat	
6	To study intracellular metabolite changes in response to chemotherapy drug and evaluation of combinatorial treatment in breast cancer	Dr. DY patil Biotechnology Institute, Dr. D Y Patil Vidyapeeth, Pune	Isha Zafar	Guide: Prof. Nilesh Kumar Sharma	Ongoing (Date of Registration: Feb, 2020)
7	To investigate the DNA joining activity of normal and oral carcinoma cells and tissues	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Mr. Ajay Kumar (PG Degree Completed)	Guide: Prof. Nilesh Kumar Sharma	2016
8	To investigate the effects of base excision repair inhibitors against temozolomide cancer cytotoxicity	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Ms. Devashree Jahagirdar (PG Degree Completed)	Guide: Prof. Nilesh Kumar Sharma	2016
9.	To understand the molecular mechanisms of cross talk between DNA ligase inhibition and cisplatin toxicity	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Ms. Aayshi Jain (PG Degree Completed)	Guide: Prof. Nilesh Kumar Sharma	2017
10	To study the role of base excision repair in Temozolomide anticancer effects	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Ms. Karishma Deshpande (PG Degree Completed)	Guide: Prof. Nilesh Kumar Sharma	2017
11	The role of non-homologous end joining DNA ligase inhibitors towards doxorubicin responsiveness.	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Ms. Sayantani Roy Choudhary (PG Degree Completed)	Guide: Prof. Nilesh Kumar Sharma	2017

12	Anti-Proliferative and anti-apoptotic effect of cow urine extract upon MCF-7 cells	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Mr. AMRESH KUMAR YADAV)	Guide: Prof. Nilesh Kumar Sharma	2018
13	Anti-cancer activity of nucleic acid enriched fraction from corn towards MCF-7 cells	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	(Mr. MAYUR SUMRA)	Guide: Prof. Nilesh Kumar Sharma	2018
14	Anti-proliferative and pro-apoptotic potential of metabolite fraction from cow urine against MCF-7 cells	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	(Ms. VIDHI UPADHYAY)	Guide: Prof. Nilesh Kumar Sharma	2019
15	Study on apoptotic effects by metabolite fraction of goat urine upon MCF-7 cells	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	(Ms. SUMITRA CHOUDHARY)	Guide: Prof. Nilesh Kumar Sharma	2019
16	Metabolite profiling of nail materials from oral cancer patients by using vertical tube gel electrophoresis (VTGE) and mass spectrometry	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Mr. MANMOHAN MITRUKA	Guide: Prof. Nilesh Kumar Sharma	2019
17	A method to study extracellular and intra-cellular metabolite profile by using vertical tube gel electrophoresis (VTGE) system	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Ms. SHEETAL PATEL	Guide: Prof. Nilesh Kumar Sharma	2019
18	Study on cytotoxicity and apoptotic effects upon HCT-116 cells by metabolite enriched fraction of goat urine	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	SEETHAMMA.T. N (PG)	Guide: Prof. Nilesh Kumar Sharma	2019

19	Study On Intracellular Tripeptide Metabolites In Cancer Cells And Their Possible Effects Upon Growth Receptors	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Hritik Chandore (PG)	Guide: Prof. Nilesh Kumar Sharma	2020
20	Study On Intracellular Tripeptide Metabolites In Cancer Cells And Their Possible Effects Upon Growth Receptors	Dr. DY patil Biotechnology Institute, Dr. D Y patil Vidyapeeth, Pune	Rushikesh Patel (PG)	Guide: Prof. Nilesh Kumar Sharma	2020

UPGRADATION OF FURTHER KNOWLEDGE :

SR No	Title	Duration	Organized at
1.	Fundamentals of Health Research, NIE, ICMR, New Delhi	18-01-2016 to 11-03-2016	NIE, ICMR, New Delhi
2.	Use of experimental animals in research	28-03-2012 to 05-04-2012	NIEHS, National Institute of Health, NC, USA
3.	Training on Radioisotope use in molecular and cellular biology research	09-05-2011 to 16-05-2011	New Jersey Medical School, Rutgers University, NJ, USA
4.	Cell imaging and molecular study	01-09-2010-08-09-2010	National Cancer Center, NJ, USA
5.	Technical Communication Skills	01-01-2007-01-05-2007	Department of Humanities and Social Sciences, IIT Roorkee

DETAILS OF ADMINISTRATE/MANAGEMENT POST:

SR NO	Name of Organization	Duration	Name of Committee/Responsibilities
1	Dr. D.Y. Patil University, Biotechnology & Bioinformatics Institute	Aug. 2013-Continued	NAAC and NBA Committee as Coordinator DPU, Pune (IQAC Committee)

			Member)
2.	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Aug. 2013- Continued	Internal Assurance Quality Cell (IQAC) as Secretary
3.	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Aug. 2013- Continued	Extra-Curricular Committee, Secretary
4.	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Aug. 2013- Continued	Institutional Biosafety, Ethics and Curriculum Committee Member
5.	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Jan, 2015- Continued	ISO (9001-2008) Coordinator
6	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Jan, 2016- Continued	Institute Bioethics and Biosafety, faculty Advisor and Secretary
7.	Dr. DY Patil University, Biotechnology & Bioinformatics Institute	Oct, 2016- Continued	Executive Member in NIRF ranking committee

Prof. NILESH KUMAR SHARMA