

NAME	Navkiran kaur		
DESIGNATION	Associate Professor		
EMAIL ID	navkirank@amity.edu		
CONTACT NUMBER	8826332111		
RESEARCH INTERESTS	Cancer biology, glycosylation, cell signaling, inflammation		
EDUCATIONAL QUALIFICATIONS:			
Name of College / University	Degree	Year	
Kurukshetra University, Kurukshetra	B.Sc. (Biochemistry)	1996	
Panjab University, Chandigarh	M.Sc. (Hons) Biochemistry	1998	
Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh	Ph.D. (Medical Biotechnology)	2008	
Title of Ph.D. thesis: Effect of different forms of HDL on Ox-LDL mediated cellular responses in differentiated monocytes/macrophages			
EXPERIENCE (in chronological order): Total 20 Years Research & Teaching			
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Associate Professor	Teaching and Research	Amity Institute of Biotechnology	Aug 2022-till date
Assistant Professor (Grade III)	Teaching and Research	Amity Institute of Biotechnology	2017 –july2022
Assistant Professor (Grade II)	Teaching and Research	Amity Institute of Biotechnology	2011- 2016
Assistant Professor (Grade I)	Teaching and Research	Amity Institute of Biotechnology	2007-2010
Senior Research fellow	Research	Postgraduate Institute of Medical Education and Research(PGIMER) , Chandigarh	2006-2007
Junior Research fellow	Research	Postgraduate Institute of Medical Education and Research(PGIMER) , Chandigarh	1999-2006
No. of Ph.D. students supervised	Awarded :2 Ongoing : 1		
No. of Junior Research fellow/ Post doc	1		
No. of M.Tech/MSc. Students supervised:	15		
No. of B.Tech/B.Sc. Students supervised:	40		

PUBLICATIONS (33)

Details: (original articles/chapters/abstracts published)

1. **Priming the Nutrition-Gut-Immuno-Oncology Axis** Saha, A., Kapoor, N., Kaur, N., Bose, S., Kesheri, M.K., Sharda, S. (2024). In: Pathak, S., Banerjee, A., Duttaroy, A.K. (eds) Microbiota and Dietary Mediators in Colon Cancer Prevention and Treatment. Springer, Singapore. https://doi.org/10.1007/978-981-96-0297-1_15.
2. Majumder, S.D., Agarwal, S., Vasisht, K., **Kaur, N.**, Bose, S. (2024). **Therapeutic Relevance of Glycosylation Inhibitors in Cancer**. In: Pathak, S., Banerjee, A., Duttaroy, A.K. (eds) Small Molecules for Cancer Treatment. Springer, Singapore. https://doi.org/10.1007/978-981-96-0301-5_9
3. **Serine proteases and their contribution to chemoresistance in cancer**. Mohammad Aman, Perna Dalal, **Navkiran Kaur**, Sudeep Bose [Pathophysiological Aspects of Proteases in Cancer](https://doi.org/10.1016/B978-0-443-30098-1.00021-5)
4. 2025, Pages 347-362 <https://doi.org/10.1016/B978-0-443-30098-1.00021-5>
5. **From enzyme to predictors: Serine proteases in cancer diagnosis and prognosis** S Bose, MA Azad, NK Borah, N **Kaur** - Pathophysiological Aspects of Proteases in Cancer, 2025, Pages 223-237. <https://doi.org/10.1016/B978-0-443-30098-1.00014-8>
6. **Integromics: Tracking the Multi-omic Expanse in Theragnostics**. Shambhavee Srivastav, Lavanya, Anupama Avasthi, **Navkiran Kaur**, Wolfgang Gaertner, Minu Kesheri, Swarna Kanchan, Shivani Sharda In: Kesheri, M., Kanchan, S., Salisbury, T.B., Sinha, R.P. (eds) Microbial Omics in Environment and Health. Springer, Singapore. https://doi.org/10.1007/978-981-97-1769-9_6
7. **Lectins as a promising therapeutic agent for breast cancer: A review** Keerti Singh[‡], Lokita Agrawal[‡], Rhea Gupta[‡], Divyam Singh, Meghavi Kathpalia, and **Navkiran Kaur** Breast Disease Volume 43, Issue 1, 2024, Pages 193-211 <https://doi.org/10.3233/BD-230047>
8. Sharda, S., Avasthi, A., Bose, S., Kaur, N. (2024). **Cellular Interactions Network in Cancer: Integrative Disease Models**. In: Sobti, R.C., Ganguly, N.K., Kumar, R. (eds) **Handbook of Oncobiology: From Basic to Clinical Sciences**. Springer, Singapore. https://doi.org/10.1007/978-981-99-6263-1_43
9. Chakraborty, M., Kaur, J., Gunjan *et al.* Clinical relevance of glycosylation in triple negative breast cancer: a review. *Glycoconj J* **41**, 79–91 (2024). <https://doi.org/10.1007/s10719-024-10151-0>
10. MicroRNAs as a theranostics: combating breast cancer stem cells. Meghavi Kathpalia, Rashi Sehgal, Navkiran Kaur. [Cancer Stem Cells and Signaling Pathways](https://doi.org/10.1016/B978-0-443-13212-4.00027-1) 2024, Pages 295-308. <https://doi.org/10.1016/B978-0-443-13212-4.00027-1>.
11. **Sacituzumab Govitecan as a Second-Line Treatment in Relapsed/Refractory Metastatic Triple-Negative Breast Cancer Patients: A Systematic Review and Meta-analysis**. Meghavi Kathpalia, Anurag Sharma, **Navkiran Kaur**. (April, 2023) Annals of Pharmacotherapy volume 58

- 12. Structuring Inflammasome-Epigenome – Phenotypic Axis in Gynecological Cancers.** S Sharda, A Avasthi, N Kau Handbook of Oncobiology: From Basic to Clinical Sciences. Pages 1-16 (2023).
- 13. Plasma proteomic analysis identified proteins associated with faulty neutrophils functionality in decompensated cirrhosis patients with sepsis** Rashi Sehgal, Navkiran Kaur, Rakhi Maiwall, Gayatri Ramakrishna, Jaswinder Singh Maras, Nirupma Trehanpati, *Cells* .2022 May 25;11(11):1745. doi: 10.3390/cells11111745.
- 14. An Insight into Antioxidant and Antimicrobial Activities of Ethnotherapeutically Important Trans Himalayan Medicinal Plants: A Review** Anupama Sharma Avasthi1*, Navkiran Kaur1 , Shivani Sharda1 and Sabari Ghosal. Journal of Pharmaceutical Research International 33(36A): 195-212, 2021; Article no.JPRI.70139.
- 15.** Sehgal, R., Maiwall, R., Rajan, V., Islam, M., Baweja, S., Kaur, N., Kumar, G., Ramakrishna, G., Sarin, S. K., & Trehanpati, N. (2022). **Granulocyte-Macrophage Colony-Stimulating Factor Modulates Myeloid-Derived Suppressor Cells and Treg Activity in Decompensated Cirrhotic Patients With Sepsis.** *Frontiers in immunology*, 13, 828949. <https://doi.org/10.3389/fimmu.2022.828949>
- 16. PVAT mediated immunomodulation in vasculo-adipose balance in atherosclerosis** Navkiran Kaur1, Anupama Avasthi1 , Shivani Sharda1 and Ashish Misra, Trends Med, Volume 21: 1-7, 2021.
- 17. Immune Surveillance by Myeloid-Derived Suppressor Cells in Liver Diseases** Sehgal R, Kaur N, Ramakrishna G, Trehan Pati N. Dig Dis. 2021 Jun 22. doi: 10.1159/000517459
- 18. Normal and reconstituted high-density lipoprotein protects differentiated monocytes from oxidized low-density lipoprotein-induced apoptosis.** Kaur N, Kumari S, Ghosh S. ARYA Atheroscler. 2020 Nov;16(6):269-277. doi: 10.22122/arya.v16i6.1582.
- 19. Bioinformatic analysis of aberrant glycosylation in Triple negative breast cancer** Navkiran kaur *et al.*, Breast Can Curr Res 2017, 2:5 (Suppl) DOI: 10.4172/2572-4118-C1-011 (first and main author)
- 20. Role of post translational modifications in breast cancer,** Navkiran Kaur *et al* Breast Can Curr Res 2017, 2:3(Suppl) DOI: 10.4172/2572-4118-C1-006 (first and main author)
- 21. Bioinformatic analysis of aberrant posttranslational modifications in breast cancer.** Navkiran *et al* abstract accepted and presented in RGCON 2017
- 22. Resistance against HIV-1: Role of chemokine receptor,CCR5 and Restriction Factor,APOBEC3G.** Arshia Berry, Sakshi Sehgal and Navkiran Kaur International journal of Pharma and BioSciences, 2017, Apr;8(2): (B) 297-306. (corresponding author).
- 23. GSIT: An Integrated web tool for identification of genomic signatures in highly similar DNA sequences** Amit Tuteja, Kandarp joshi, Swati Subodh, Navkiran kaur, Bioinformation , August 2014; vol 10(1).

	24. Mutation profiling of the hepatitis B Virus strains circulating in North Indian Population Amit Tuteja, Abu Baker Siddiqui, Kaushal Madan, Rohit Goyal, Shalimar, Vishnubhatla Sreenivas, <u>Navkiran Kaur</u>, Subrat K. Panda, Krishnamoorthy Narayanasamy, Swati Subodh, Subrat K. Acharya. PLOS one, March 2014, volume 9, issue 3, e91150 . 25. Role of different forms of HDL on ox-LDL induced apoptosis through an NF-κB-Bcl-2 pathway in differentiated monocytes' Navkiran Kaur & Sujata Ghosh WCIRDC Abstracts, <i>Endocr Pract.</i> 2014; 20(No. 1) 19A. 26. Proteomic study of the of posttranslational modifications (phosphorylation and glycosylation) and its significance in human breast cancer Parul Jauhri and <u>Navkiran kaur</u> , Molecular Targets and Cancer Therapeutics , 2013 [corresponding author] 27. Abstract accepted entitled 'Role of different forms of HDL on Ox-LDL mediated expressions of inflammatory cytokines through NFκappa B in differentiated monocytes' in the proceedings of International symposium organized by International Society of atherosclerosis, 2013. 28. Role of different forms of HDL (Ox-HDL and N HDL) on Ox-LDL induced apoptosis in differentiated monocytes <u>N.Kaur</u> S .Kumari S.Jain' S. Majumdar S.Ghosh. (2010), <i>Atherosclerosis supplements</i>, 11 issue 2, P427, 107-108 29. Modulation of Oxidized Ldl Mediated Cellular Responses By Different Forms of Hdl Jain, S; <u>Kaur, N</u>; Kumari, S; Ghosh, S (2010) <i>Journal of Hypertension</i>: Volume 28 - Issue - p e67 30. Role of nHDL and rHDL on Ox-LDL mediated apoptosis in human monocytes/macrophages: Implications for atherosclerotic pathology. <u>Navkiran Kaur</u>, Sujata Ghosh, Savita Kumari, Sanjay Jain, Subhash Varma, Siddhartha Majumdar (2008) <i>Heart lung and Circulation</i>: 7, supplement 1,S25. 31. Randomized evaluation of fluid resuscitation with crystalloid (saline) and colloid (polymer from degraded gelatin in saline) in pediatric septic shock Manasaranjan Upadhyay, Sunit Singhi, Jayashree Murlidharan, <u>Navkiran Kaur</u> and S. Majumdar (2005) <i>Indian Pediatrics</i> ; 42:223-231. For this paper Dr. M. Upadhyay was awarded S.T. Achar Gold Medal of Indian Academy of Pediatrics at PEDICON-2001, Patna, Feb. 7-11, 2001 32. MESOTHELIOMA:CURRENT ROSPECTIVES, May 2014 pg 1-4, BioEvolution, Hema madhav & <u>Navkiran kaur</u>, GIAP, ISBN 978-81-925781-3-2 33. ROLE OF CANCER STEM CELLS IN BREAST CANCER, May 2014, pg 24 -27, BioEvolution, Sahil Nagpal & <u>Navkiran Kaur</u>, GIAP, ISBN 978-81-925781-3-2
PATENTS (total no.) nil	Details: NA

RESEARCH PROJECTS Completed: <i>(total no.) 1</i> Ongoing: <i>(total no.) 1</i>	Details: Project entitled ‘Screening and Identification of disease specific sialo glycosylation changes with specific lectins in breast carcinoma’ sanctioned by UP-CST – (2016-2018) as co-investigator. (status completed) Responsibilities: My major responsibility is to identify specific lectins which has probable role in identification of disease specific sialo-glycosylates in breast cancer cells and further to study the role of specific lectin (s) in the modulation of cellular responses in view of apoptosis in breast cancer using different techniques (cell culture, affinity chromatography, immunocytochemistry, RT PCR and western immunoblots.). Various Bioinformatic tools were also used to further substantiate and to study the biological interactions in breast cancer. Details: Project entitled ‘Biological significance of disease specific sialo glycosylation in triple negative Breast cancer’ approved by ICMR – (January 2021-july 2025) as Principal Investigator. (status ongoing) Responsibilities: My major responsibility will be in execution of the project along with other investigators and primarily I will be involved and working on the optimization and standardization of LC-MS and bioinformatics work involved in studying the biological significance of specific sialo glycosylates in triple negative breast cancer
AWARDS & HONOURS/ DISTINCTIONS	➤ Travel Grant Award from European Atherosclerosis Society for attending and participating in EAS congress held in Milan, Italy (2012) ➤ Travel grant Award from the Indian National Science Academy, Govt of India, to attend international conference held in Milan, Italy (2012). ➤ Travel Bursary From Immunology Society, National Institute of Immunology, New Delhi for attending the international conference held in Milan , Italy (2012) ➤ Travel Grant Award from ICLA for attending and participating in Ist international conference on lipid metabolism and Atherosclerosis held in seoul,South Korea (2012) ➤ Shortlisted for Travel grant Award from European Atherosclerosis Society for attending and participating in EAS congress held in Hamburg, Germany (2010) ➤ Shortlisted for Travel grant Award from the Indian National Science Academy, Govt of India, to attend international conference held in Germany, (2010). ➤ Nominee for NS Dhalla young scientist award in Basic Cardiovascular Biology under Aupices of International Society for Heart Research (Indian Section), International Academy of Cardiovascular Sciences (Indian Section) and Heart Failure Society of India (2008) ➤ Research work carried out on on Randomized evaluation of fluid resuscitation with crystalloid (saline) and colloid (polymer from degraded gelatin in saline) in pediatric septic shock work was awarded with S.T. Achar Gold Medal of Indian Academy of Pediatrics at PEDICON-2001, Patna, Feb. 7-11,(2001) ➤ Senior Research Fellow, Indian Council of Medical

	Research, Govt. of India.
MEMBERSHIP with Professional/ Academic bodies	Member of European Atherosclerosis society(annual membership)
	Active member of American Association of cancer research (Annual member ship)
	Member of European Society of Medical Oncology
	Women in cancer Research, 2013-till date (all women members of AACR are entitled)
	Member of working group of atherosclerosis and vascular biology (Annual membership)
	Member of Heart failure Association 2013-till date
	Professional Associate Membership of American Heart Association/American Stroke Association with scientific council Affiliation of Council of Basic cardiovascular Science