



Name: Dr. Shruti Sharan
Designation: Assistant Professor
Department: Biotechnology
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Educational Qualification:

<i>Degree</i>	<i>University</i>	<i>Year</i>
Ph.D.	IIT Roorkee, India	2016
M.Sc.	N.D.R.I, Karnal	2009

Experience:

Assistant Professor (2024 - Present) Trident Academy of Creative Technology
Research Associate (2016 – 2019) Purdue University, West Lafayette, Indiana, USA

Research Focus:

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- ❖ Public health initiatives: Focusing on chronic non-communicable diseases.
 - ❖ Molecular endocrinology: Encompassing environmental and molecular toxicology
 - ❖ Probiotics, Cancer Biology and GPCR signaling.
 - ❖ Genomics
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Honors & Reward:

- ❖ Junior Research Fellowship (November 2010 – March 2014)
- ❖ National Eligibility Test (NET) for lectureship (2009)
- ❖ Qualified Graduate Aptitude Test 2012
- ❖ Received first prize for Poster presentation in international conference of RTBTR conducted by Dept of Biotechnology, IIT Roorkee in Dec 2014

Academic/ Research Related Achievement (Includes FDP, Workshop, Seminar, Conference & Etc.):

- ❖ Attended International Conference Blue Economy-2025 on 23-24 January 2025 at Auditorium, Campus-6, KIIT University, Bhubaneswar, Odisha.
 - ❖ Attended International conference Immunocon-24 on 17th-20th October, 2024 at J.N. Tata Auditorium, IISc, organized by IISC Bengaluru, Karnataka.
 - ❖ Poster presented at Arthropod Genomics Symposium 2018, organized by University of Illinois at Urbana-Champaign, USA.
 - ❖ Poster presented at 2nd International Conference on Stem Cells and Cancer. Organized jointly by Agamy Biotech Pvt. Ltd., Pune India and Institute of Experimental Cancer Research, University of Ulm Comprehensive Cancer Center, Germany at Pune, Maharashtra, India. October 15-18, 2011.
 - ❖ Poster presented at 12th International Congress of Ethnopharmacology on Traditional Medicine and Globalization – The Future of Ancient Systems of Medicine. Organized by School of Natural Product Studies, Jadavpur University, Kolkata, India. February 17-19, 2012.
 - ❖ Poster presentation at National Conference on Endocrinology and reproduction: Innovative in Reproductive Biotechnology and 31st meeting of the society for reproductive biology and comparative endocrinology. Organized by Department of Biotechnology and Microbiology, Karnataka University, Dharwad, Karnataka. 11-13 February, 2013.
 - ❖ Poster presented at International Conference on Molecular Signaling: Recent trends in Biomedical and Translational Research. Organized by Department of Biotechnology, IIT Roorkee, Roorkee, Uttarakhand. December 17-19, 2014.
 - ❖ Participated in an online workshop on Artificial Intelligence Tools (2024)
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Publication:

1. Matthews BJ, Dudchenko O, Kingan SB, Koren S, Antoshechkin I, Crawford JE, Glassford WJ, Herre M, Redmond SN, Rose NH, Weedall GD, Wu Y, Batra SS, Brito-Sierra CA, Buckingham SD, Campbell CL, Chan S, Cox E, Evans BR, Fansiri T, Filipović I, Fontaine A, Gloria-Soria A, Hall R, Joardar VS, Jones AK, Kay RGG, Kodali VK, Lee J, Lycett GJ, Mitchell SN, Muehling J, Murphy MR, Omer AD, Partridge FA, Peluso P, Aiden AP, Ramasamy V, Rašić G, Roy S, Saavedra-Rodriguez K, **Sharan S**, Sharma A, Smith ML, Turner J, Weakley AM, Zhao Z, Akbari OS, Black WC 4th, Cao H, Darby AC, Hill CA, Johnston JS, Murphy TD, Raikhel AS, Sattelle DB, Sharakhov IV, White BJ, Zhao L, Aiden EL, Mann RS, Lambrechts L, Powell JR, Sharakhova MV, Tu Z, Robertson HM, McBride CS, Hastie AR, Korlach J, Neafsey DE, Phillippy AM, Vossall LB. Improved reference genome of *Aedes aegypti* informs arbovirus vector control. *Nature*. 2018 Nov;563(7732):501-507. [IF = 64]
2. **Sharan S**, Murgia MV, Kaur J, Austin W, Hagen L, Wu L, Chen L, Scott JA, Flaherty DP, Scharf ME, Watts VJ, Hill CA. High-content phenotypic screening identifies novel chemistries that disrupt mosquito activity and development. *Pestic Biochem Physiol*. 2022 Mar; 182:105037. [IF = 4.9]
3. Hill CA, **Sharan S**, Watts VJ. Genomics, GPCRs and new targets for the control of insect pests and vectors. *Curr Opin Insect Sci*. 2018 Dec; 30:99-106. [IF = 5.3]
4. **Sharan S**, & Hill C A, Potential of GPCR-Targeting Insecticides for Control of Arthropod Vectors: Volume 2: *GPCRs and Ion Channels*. (pp. 55-84). American Chemical Society. (Book Chapters). [IF = NA]
5. **Sharan S**, Nikhil K, Roy P. Effects of low dose treatment of tributyltin on the regulation of estrogen receptor functions in MCF-7 cells. *Toxicol Appl Pharmacol*. 2013; 269(2):176-86. [IF = 4.4]
6. **Sharan S**, Nikhil K, Roy P. Disruption of thyroid hormone functions by low dose exposure of tributyltin: an in vitro and in vivo approach. *Gen Comp Endocrinol*. 2014 Sep 15; 206:155-65. [IF = 3.4]
7. **Sharan S**, Kansal VK, Effect of feeding probiotic dahi containing *Lactobacillus acidophilus* and *Bifidobacterium bifidum* on enzymes that catalyze carcinogen activation and detoxification in rats *Milchwissenschaft*, 2011: 66;244-47[IF = 0.4]
8. Gupta P, **Sharan S**, Roy P, Lahiri D. Aligned Carbon Nanotubes Reinforced Polymeric Scaffold with Electrical Cues for Neural Tissue Regeneration. *Carbon*, 95, 715-724. [IF = 6.19]

9. Nikhil K, **Sharan S**, Singh AK, Chakraborty A, Roy P. Anticancer activities of pterostilbene-isothiocyanate conjugate in breast cancer cells: involvement of PPAR γ . *PLoS One*. 2014; 9(8): e104592. [IF = 3.7]
10. Narendar K, **Sharan S**, Srivastava, S, & Roy, P Assessment of estrogenic potential of diethyl phthalate in female reproductive system involving both genomic and non-genomic actions. *Reprod Toxicol.*, 2014; 49, 12-26. [IF = 3.4]
11. Nikhil K, **Sharan S**, Roy P. PTER-ITC inhibits osteoclastogenesis by suppressing the activation of NF- κ B and MAPK in RANKL-induced RAW 264.7 cells. *Pharmacological Reports*. 2015. [IF = 2.16]
12. Nikhil K, **Sharan S**, Palla SR, Sondhi SM, Peddinti RK, Roy P. Assessment of the role of a pterostilbene derivative as anti-inflammatory agent and understanding its mode of action. *Int Immunopharmacol*. 2015; 28:10-21). [IF = 2.71]
13. Nikhil K, **Sharan S**, Chakraborty A, Roy P. Pterostilbene-isothiocyanate conjugate suppresses growth of prostate cancer cells irrespective of androgen receptor status. *PLoS One*. 2014; 9(4): e93335. [IF = 3.7]
14. Nikhil K, **Sharan S**, Chakraborty A, Bodipati N, Krishna Peddinti R, Roy P. Role of isothiocyanate conjugate of pterostilbene on the inhibition of MCF-7 cell proliferation and tumor growth in Ehrlich ascitic cell induced tumor bearing mice. *Exp Cell Res*. 2014; 320(2):311-28. [IF = 3.37]
15. Nikhil K, **Sharan S**, Roy P A brief overview of androgen receptor: Its structure, functions and role in health and disease. *J Endocrinol Reprod*. 2013; 17(1):19-30. [IF = NA]
16. Nikhil, K., **Sharan S**., Wishard, R., Palla, S. R., Peddinti, R. K., & Roy, P. (2016). Pterostilbene carboxaldehyde thiosemicarbazone, a resveratrol derivative inhibits 17 β -Estradiol induced cell migration and proliferation in HUVECs. *Steroids*, 108, 17-30. [IF = 2.7]
17. Vashisth, P., Srivastava, A. K., Nagar, H., Raghuvanshi, N., **Sharan S**,... & Pruthi, V. (2016). Drug functionalized microbial polysaccharide-based nanofibers as transdermal substitute. *Nanomedicine: Nanotechnology, Biology and Medicine*. [IF = 7.2]

- 18.Kumar G, Gupta R, Sharan S, Roy P, Pandey DM. Anticancer activity of plant leaves extract collected from a tribal region of India. 3 *Biotech*. 2019 Nov;9(11):399. [IF = 2.8]
 - 19.Matthews, B. J., Dudchenko, O., Kingan, S., Koren, S., Antoshechkin, I., Crawford, J. E., ...Sharan S..... & Voshall, L. B. (2017). Improved *Aedes aegypti* mosquito reference genome assembly enables biological discovery and vector control. *BioRxiv*, 240747[IF = NA]
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