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Education

June 2011 to July 2017: Advanced Centre for Treatment Research and Education in Cancer, Tata Memorial Centre, Navi Mumbai, Maharashtra, India.
Awarded the degree of Ph.D for thesis entitled "Binding partner of histone H2A variant and its molecular implications in carcinogenesis". Work supervised by Dr. Sanjay Gupta.

Publications

1. Reddy, D., Bhattacharya, S., Shah, S., Rashid, M., and Gupta, S. (2022). DNA methylation mediated downregulation of histone H3 variant H3.3 affects cell proliferation contributing to the development of HCC. Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease 1868, 166284.
2. Bhattacharya, S., Wang, S., Reddy, D., Shen, S., Zhang, Y., Zhang, N., Li, H., Washburn, M.P., Florens, L., Shi, Y., *et al.* (2021). Structural basis of the interaction between SETD2 methyltransferase and hnRNP L paralogs for governing co-transcriptional splicing. Nature Communications *12*, 6452.
3. Shah, S.G., Mandloi, T., Kunte, P., Natu, A., Rashid, M., Reddy, D., Gadewal, N., and Gupta, S. (2020). HISTome2: a database of histone proteins, modifiers for multiple organisms and epidrugs. Epigenetics & Chromatin 13, 31.
4. Monpara, J., Velga, D., Verma, T., Gupta, S., and Vavia, P. (2019). Cationic cholesterol derivative efficiently delivers the genes: in silico and in vitro studies. Drug Deliv Transl Res 9, 106-122.
5. Bhattacharya, S., Reddy, D., Jani, V., Gadewal, N., Shah, S., Reddy, R., Bose, K., Sonavane, U., Joshi, R., Smoot, D., *et al.* (2018). Correction to: Histone isoform H2A1H promotes attainment of distinct physiological states by altering chromatin dynamics. Epigenetics Chromatin *11*, 67.
6. Gurjar, M., Raychaudhuri, K., Mahadik, S., Reddy, D., Atak, A., Shetty, T., Rao, K., Karkhanis, M.S., Gosavi, P., Sehgal, L., et al. (2018). Plakophilin3 increases desmosome assembly, size and stability by increasing expression of desmocollin2. Biochem Biophys Res Commun 495, 768-774.
7. Reddy, D., and Workman, J.L. (2018). Targeting BAF-perturbed cancers. Nat Cell Biol 20, 1332-1333.
8. Reddy, D., Bhattacharya, S., Jani, V., Sonavane, U., Joshi, R., and Gupta, S. (2018). Biochemical and Biophysical Characterisation of Higher Oligomeric Structure of Rat Nucleosome Assembly Protein 1. Protein J 37, 58-69.
9. Reddy, D., Khade, B., Pandya, R., and Gupta, S. (2017). A novel method for isolation of histones from serum and its implications in therapeutics and prognosis of solid tumours. Clin Epigenetics 9, 30.
10. Tyagi, M. *, Reddy, D. *, and Gupta, S. (2017). Genomic characterization and dynamic methylation of promoter facilitates transcriptional regulation of H2A variants, H2A.1 and H2A.2 in various pathophysiological states of hepatocyte. Int J Biochem Cell Biol 85, 15-24. *These authors contributed equally to this work.
11. Bhattacharya, S., Reddy, D., Ingle, A., Khade, B., and Gupta, S. (2016). Brief Communication: Featured Article: Histone H2A mono-ubiquitination and cellular transformation

are inversely related in N-nitrosodiethylamine-induced hepatocellular carcinoma. Exp Biol Med (Maywood) *241*, 1739-1744.
12. Bhattacharya, S., Reddy, D., Reddy, R., Sharda, A., Bose, K., and Gupta, S. (2016). Incorporation of a tag helps to overcome expression variability in a recombinant host. Biotechnol Rep (Amst) *11*, 62-69.
13. Khan, S.A., Reddy, D., and Gupta, S. (2015). Global histone post-translational modifications and cancer: Biomarkers for diagnosis, prognosis and treatment? World J Biol Chem *6*, 333-345.
14. Sharma, A.K., Khan, S.A., Sharda, A., Reddy, D.V., and Gupta, S. (2015). MKP1 phosphatase mediates G1-specific dephosphorylation of H3Serine10P in response to DNA damage. Mutat Res *778*, 71-79.
15. Tyagi, M., Khan, S.A., Bhattacharya, S., Reddy, D., Sharma, A.K., Khade, B., and Gupta, S. (2015). Techniques to access histone modifications and variants in cancer. Methods Mol Biol *1238*, 251-272.