

PEER-REVIEWED PUBLICATIONS

Metrics: PubMed indexed publications 27; h-index 15.

1. Sayaman RW, Miyano M, Carlson EG, **Senapati P**, Zirbes A, Shalabi SF, Todhunter ME, Seewaldt VE, Neuhausen SL, Stampfer MR, Schones DE, LaBarge M. (2024) Luminal epithelial cells integrate variable responses to aging into stereotypical changes that underlie breast cancer susceptibility. *Elife*; 13:e95720. doi: 10.7554/eLife.95720.
2. Vidal CM, Alva-Ornelas JA, Chen NZ, **Senapati P**, Tomsic J, Robles VM, Resto C, Sanchez N, Sanchez A, Hyslop T, Emwas N, Aljaber D, Bachelder N, Martinez E, Ann D, Jones V, Winn RA, Miele L, Ochoa AC, Dietze EC, Natarajan R, Schones D, Seewaldt VL. (2024) Insulin Resistance in Women Correlates with Chromatin Histone Lysine Acetylation, Inflammatory Signaling, and Accelerated Aging. *Cancers (Basel)*; 2024 Aug 1;16(15):2735. DOI: 10.3390/cancers16152735.
3. **Senapati P**, Miyano M, Basam M, Sayaman RW, Leung A, LaBarge MA, Schones DE. (2023) Loss of epigenetic suppression of retrotransposons with oncogenic potential in aging mammary luminal epithelial cells. *Genome Research*; 33(8):1229-1241. DOI: 10.1101/gr.277511.122.
4. Shin H, Leung A, Costello KR, **Senapati P**, Kato H, Moore RE, Lee M, Lin D, Tang X, Pirrotte P, Chen ZB, Schones DE. (2023) Inhibition of DNMT1 methyltransferase activity via glucose-regulated O-GlcNAcylation alters the epigenome. *Elife*; 12:e85595. DOI: 10.7554/eLife.85595.
5. Dror E, Fagnocchi L, Wegert V, Apostle S, Grimaldi G, Gruber T, Panzeri, I, Heyne S, Hoffler KD, Kreiner V, Ching R, Lu TT, Semwal A, Johnson B, **Senapati P**, Lempradl A, Schones D, Imhof A, Shen H, Pospisilik JA. (2023) Epigenetic dosage identifies two major and functionally distinct β cell subtypes. *Cell Metabolism*; 35, 1–16. DOI: 10.1016/j.cmet.2023.03.008.
6. **Senapati P**, Bhattacharya A, Das S, Dey S, Sudarshan D, Shyla G, Vishwakarma J, Sudevan S, Ramachandran R, Maliekal TT, Kundu TK. (2022) Histone chaperone Nucleophosmin regulates transcription of key genes involved in oral tumorigenesis. *Molecular and Cellular Biology*; 42(2):e0066920. DOI: 10.1128/MCB.00669-20.
7. Miyano M, Sayaman RW, Shalabi SF, **Senapati P**, Lopez JC, Angarola BL, Hinz S, Zirbes A, Anczukow O, Yee LD, Sedrak MS, Stampfer MR, Seewaldt VL, LaBarge MA. (2021) Breast-specific molecular clocks comprised of ELF5 expression and promoter methylation identify individuals susceptible to cancer initiation. *Cancer Prevention Research*; 14(8):779-794. DOI: 10.1158/1940-6207.CAPR-20-0635.
8. Ishak Gabra MB, Yang Y, Li H, **Senapati P**, Hanse EA, Lowman XH, Tran TQ, Zhang L, Doan LT, Xu X, Schones DE, Fruman DA, Kong M. (2020) Dietary glutamine supplementation suppresses epigenetically-activated oncogenic pathways to inhibit melanoma tumour growth. *Nature Communications*; 11(1):3326. DOI: 10.1038/s41467-020-17181-w.
9. **Senapati P**, Kato H, Lee M, Leung A, Thai C, Sanchez A, Gallagher EJ, LeRoith D, Seewaldt VL, Ann DK, Schones DE. (2019) Hyperinsulinemia promotes aberrant histone acetylation in triple-negative breast cancer. *Epigenetics & Chromatin*; 12(1):44. DOI: 10.1186/s13072-019-0290-9.
10. Das S, Zhang E, **Senapati P**, Amaram V, Reddy MA, Stapleton K, Leung A, Lanting L, Wang M, Chen Z, Kato M, Oh HJ, Guo Q, Zhang X, Zhang B, Zhang H, Zhao Q, Wang W, Wu Y, Natarajan R. (2018) A novel Angiotensin II induced long noncoding RNA *Giver* regulates oxidative stress, inflammation, and proliferation in vascular smooth muscle cells. *Circulation Research*; 123(12):1298-1312. DOI: 10.1161/CIRCRESAHA.118.313207.

11. **Senapati P**, Dey S, Sudarshan D, Das S, Kumar M, Kaypee S, Mohiyuddin A, Kodaganur GS, Kundu TK. (2018) Oncogene c-fos and mutant R175H p53 regulate expression of Nucleophosmin implicating cancer manifestation. *The FEBS Journal*; 285(18):3503-3524. DOI: 10.1111/febs.14625.
12. Das S, Reddy MA, **Senapati P**, Stapleton K, Lanting LL, Wang M, Amaram V, Ganguly R, Zhang L, Devaraj S, Schones DE, Natarajan R. (2018) Diabetes Mellitus-induced Long Noncoding RNA *Dnm3os* regulates macrophage functions and inflammation via nuclear mechanisms. *Arteriosclerosis, Thrombosis and Vascular Biology*; 38(8):1806-1820. DOI: 10.1161/ATVBAHA.117.310663.
13. Kaypee S, Sahadevan SA, Sudarshan D, Halder Sinha S, Patil S, **Senapati P**, Kodaganur GS, Mohiyuddin A, Dasgupta D, Kundu TK. (2018) Oligomers of human histone chaperone NPM1 alter p300/KAT3B folding to induce autoacetylation. *Biochimica et Biophysica Acta (BBA) - General Subjects*; 1862(8):1729-1741. DOI: 10.1016/j.bbagen.2018.05.003.
14. Das S, **Senapati P**, Chen Z, Reddy MA, Ganguly R, Lanting LL, Mandi V, Bansal A, Leung A, Zhang S, Jia Y, Wu X, Schones, DE, Natarajan R. (2017) Regulation of Angiotensin II Actions by Enhancers and Super-enhancers in Vascular Smooth Muscle Cells. *Nature Communications*; 13;8(1):1467. DOI: 10.1038/s41467-017-01629-7.
15. Mukhopadhyay A, Sehgal L, Bose A, Gulvady A, **Senapati P**, Thorat R, Basu S, Bhatt K, Hosing AS, Balyan R, Borde L, Kundu TK, Dalal SN. (2016) 14-3-3 γ Prevents Centrosome Amplification and Neoplastic Progression. *Scientific Reports*; 6:26580. DOI: 10.1038/srep26580.
16. Shandilya J*, **Senapati P***, Dhanasekaran K, Kumar M, Bangalore SS, Hari Kishore AH, Bhat A, Kodaganur GS, Kundu TK. (2014) Phosphorylation of multifunctional nucleolar protein Nucleophosmin (NPM1) by Aurora kinase B is critical for mitotic progression. *FEBS Letters*; 588(14):2198-205. DOI: 10.1016/j.febslet.2014.05.014.
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17. Shandilya J*, **Senapati P***, Hans F, Menoni H, Bouvet P, Dimitrov S, Angelov D, Kundu TK. (2014) Centromeric histone variant CENP-A represses acetylation-dependent chromatin transcription that is relieved by histone chaperone NPM1. *Journal of Biochemistry*; 156(4):221-7. DOI: 10.1093/jb/mvu034.
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Paper of the year 2014
18. Sethi G, Chatterjee S, Rajendran P, Li F, Shanmugam MK, Wong KF, Kumar AP, **Senapati P**, Behera AK, Hui KM, Basha J, Natesh N, Luk JM, Kundu TK. (2014) Inhibition of STAT3 dimerization and acetylation by garcinol suppresses the growth of human hepatocellular carcinoma in vitro and in vivo. *Molecular Cancer*; 13(1):66. DOI: 10.1186/1476-4598-13-66.
19. Majumder P, Banerjee A, Shandilya J, **Senapati P**, Chatterjee S, Kundu TK, Dasgupta D. (2013) Minor groove binder distamycin remodels chromatin but inhibits transcription. *PLoS One*; 8(2):e57693. DOI: 10.1371/journal.pone.0057693.
20. Das S, Cong R, Shandilya J, **Senapati P**, Moindrot B, Monier K, Delage H, Mongelard F, Kumar S, Kundu TK, Bouvet P. (2013) Characterization of Nucleolin K88 acetylation defines a new pool of Nucleolin colocalizing with pre-mRNA splicing factors. *FEBS Letters*; 587(5):417-24. DOI: 10.1016/j.febslet.2013.01.035.
21. Gadad SS, Rajan RE, **Senapati P**, Chatterjee S, Shandilya J, Dash PK, Ranga U, Kundu TK. (2011) HIV-1 infection induces acetylation of NPM1 that facilitates Tat localization and enhances viral transactivation. *Journal of Molecular Biology*; 410(5): 997-1007. DOI: 10.1016/j.jmb.2011.04.009.

22. Gadad SS, **Senapati P**, Syed SH, Rajan RE, Shandilya J, Swaminathan V, Chatterjee S, Colombo E, Dimitrov S, Pelicci PG, Ranga U, Kundu TK. (2011). The multifunctional protein nucleophosmin (NPM1) is a human linker histone H1 chaperone. *Biochemistry*; 50(14): 2780-9. DOI: 10.1021/bi101835j.

REVIEW ARTICLES

1. Chatterjee S*, **Senapati P***, Kundu TK. (2012) Post-translational modifications of lysine in DNA damage repair. *Essays in Biochemistry*; 52:93–111. DOI: 10.1042/bse0520093.

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2. Selvi B R, **Senapati P**, Kundu TK. (2012) Small molecule modulators of epigenetic modifications: Implications in therapeutics. *Current Science*; 102(1):29-36. DOI: Not available.
3. Arif M, **Senapati P**, Shandilya J, and Kundu TK (2010). Protein lysine acetylation in cellular function and its role in cancer manifestation. *Biochimica et Biophysica Acta (BBA) - Gene Regulatory Mechanisms*; 1799(10-12):702-16. DOI: 0.1016/j.bbagr.2010.10.002.

BOOK CHAPTERS

1. Singh S*, **Senapati P***, Kundu TK (2022) Metabolic Regulation of Lysine Acetylation: Implications in Cancer. *Subcellular Biochemistry*; Metabolism and Epigenetic Regulation: Implications in Cancer (*Springer*) 100:393-426. DOI: 10.1007/978-3-031-07634-3_12.

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2. **Senapati P**, Sudarshan D, Gadad SS, Shandilya J, Swaminathan V, Kundu TK (2015) Methods to study Histone chaperone function in Nucleosome Assembly and Chromatin Transcription. *Methods in Molecular Biology*; 1288:375-94. DOI: 10.1007/978-1-4939-2474-5_22.
3. Kumari S, Swaminathan A, Chatterjee S, **Senapati P**, Boopathi R, Kundu TK. (2013) Chromatin Organization, Epigenetics, and Differentiation: An evolutionary perspective. *Subcellular Biochemistry*; Epigenetics Development and Disease (*Springer*) 61:3-35. DOI: 10.1007/978-94-007-4525-4_1.