

Publications

1. Shinde PL, Kumar V, Singh S, Sivakumar KC, Abhirami P, Mishra A, **Mishra R***. Targeting Galectin-3 C-epitope oligomers associated maladaptive mechanotransductive signaling in pressure-overload–induced left ventricular cardiac hypertrophy. *bioRxiv*. 2026;2026.02.09.704762. doi:10.64898/2026.02.09.704762.
(Corresponding Author)
2. Shinde PL, Kumar V, Singh S, Sivakumar KC, **Mishra R***. Galectin-3 C-epitope, ANP, PPIA, and albumin function as drug-responsive panel biomarkers and therapeutic targets in aging and pressure-overload–induced cardiac hypertrophy. *bioRxiv*. 2025;2025.05.31.657024. doi:10.1101/2025.05.31.657024.
(Corresponding Author)
3. Gayathri KG, Shinde PL, John S, Sivakumar KC, **Mishra R***. Understanding the combined effects of high glucose-induced hyperosmotic stress and oxygen tension in tumourigenesis: From mechanism to anticancer therapeutics. *Cells*. 2023;12(6):825. doi:10.3390/cells12060825. (IF: 7.666)
(Corresponding Author)
4. John S, Gayathri KG, Krishna AP, **Mishra R***. Neurotherapeutic implications of sense-and-respond strategies generated by astrocytes and astrocytic tumours to combat pH mechanical stress. *Neuropathol Appl Neurobiol*. 2022. doi:10.1111/nan.12774. (IF: 8.090; CiteScore: 11.5)
(Corresponding Author)
5. Krishna AP, John S, Shinde PL, **Mishra R***. Proteo-transcriptomics meta-analysis identifies SUMO2 as a promising target in glioblastoma multiforme therapeutics. *Cancer Cell Int*. 2021;21:575. doi:10.1186/s12935-021-02279-y. (IF: 6.72)
(Corresponding Author)
6. John S, Sivakumar KC, **Mishra R***. Bacoside A induces tumour cell death in human glioblastoma cell lines through catastrophic macropinocytosis. *Front Mol Neurosci*. 2017;10:171. doi:10.3389/fnmol.2017.00171. (IF: 6.2; CiteScore: 8.56)
(Corresponding Author)
7. John S, Sivakumar KC, **Mishra R***. Extracellular proton concentrations impact LN229 glioblastoma tumour cell fate via differential modulation of surface lipids. *Front Oncol*. 2017;7:2. doi:10.3389/fonc.2017.00002. (IF: 6.244)
(Corresponding Author)
8. John S, **Mishra R***. mRNA transcriptomics of galectins unveils heterogeneous organisation in mouse and human brain. *Front Mol Neurosci*. 2016;9:139. doi:10.3389/fnmol.2016.00139. (IF: 6.2; CiteScore: 8.56)
(Corresponding Author)
9. John S, **Mishra R***. Galectin-9: From cell biology to complex disease dynamics. *J Biosci*. 2016;41(3):507-534. (IF: 2.76)
(Corresponding Author)
10. **Mishra R***, Grzybek M, Niki T, Hirashima M, Simons K. Galectin-9 trafficking regulates apical-basal polarity in Madin–Darby canine kidney epithelial cells. *Proc Natl*

- Acad Sci U S A.* 2010;107(41):17633-17638. doi:10.1073/pnas.1012424107. (IF: 11.2)
(*First Author*)
11. Horlacher T, Oberli MA, Werz DB, Kröck L, Bufali S, Mishra R, Sobek J, Seeberger PH. Determination of carbohydrate-binding preferences of human galectins with carbohydrate microarrays. *ChemBioChem.* 2010;11(11):1563-1573. doi:10.1002/cbic.201000020. (IF: 3.76)
 12. Gupta SK*, **Mishra R***, Kusum S, Spedding M, Meiri KF, Gressens P, Mani S. GAP-43 is essential for the neurotrophic effects of BDNF and positive AMPA receptor modulator S18986. *Cell Death Differ.* 2009;16(4):624-637. doi:10.1038/cdd.2008.188. (IF: 15.82)
(*Equal First Author*)
 13. Shen Y*, **Mishra R***, Mani S, Meiri KF. Both cell-autonomous and cell non-autonomous functions of GAP-43 are required for normal cerebellar patterning in vivo. *Cerebellum.* 2008;7(3):451-466. doi:10.1007/s12311-008-0049-5. (IF: 3.84)
(*Equal First Author*)
 14. Gupta SK*, **Mishra R***, Juncker D, Meiri KF, Mani S. Addressing the role of extrinsic cues in neuronal polarization. *Dev Biol.* 2008;319(2). doi:10.1016/j.ydbio.2008.05.124. (IF: 3.58)
(*Equal First Author*)
 15. **Mishra R***, Gupta SK, Meiri KF, Fong M, Thostrup P, Juncker D, Mani S. GAP-43 is key to mitotic spindle control and centrosome-based polarization in neurons. *Cell Cycle.* 2008;7(3):348-357. doi:10.4161/cc.7.3.5235. (IF: 5.0)
(*First Author*)
 16. **Mishra R***, Mani S. Role of GAP-43 in early cerebellar patterning. *Dev Biol.* 2008;247:491. (IF: 3.58)
(*First Author*)