

Chapter 7: List of Publications

7.1 Publications from Ph.D. thesis work

a. Research Articles

1. **Currim F**, Singh J, Shinde A, Gohel D, Roy M, Singh K, Shukla S, Mane M, Vasiyani H, Singh R. Exosome release is modulated by the mitochondrial-lysosomal crosstalk in Parkinson's disease stress conditions. *Molecular Neurobiology*. 2021 Apr;58:1819-33.
2. **Currim F**, Shukla S, Singh J, Gohel D, Mane M, Shinde A, Roy M, Goyani S, Vasiyani H, Chandran A, Rochet JC, Cannon J, Singh R. Neuronal exosomal miRNAs modulate mitochondrial functions and cell death in bystander neuronal cells under Parkinson's Disease stress conditions. (Manuscript under review).
3. **Currim F**, Brown-Leung J, Syeda T, Baloni P, Rochet JC, Singh R, Cannon J. Rotenone induced exosomal miRNA alterations in rat cerebrospinal fluid and serum induces mitochondrial dysfunction and cell death. (Manuscript under preparation).

b. Conferences

Poster Presentations

1. **F. Currim**, J.M. Brown-Leung, T. Syeda, J.C. Rochet, R. Singh, J.R. Cannon. Investigation of exosomal miRNAs in cerebrospinal fluid/serum of the rotenone-induced rat model of Parkinson's Disease. SOT 62nd Annual Meeting and ToxExpo. Nashville, Tennessee, March 19-23, 2023.
2. **Fatema Currim**, Shatakshi Shukla, Jyoti Singh, Dhruv Gohel, Anjali Shinde, Shani Goyani, Milton Roy, Minal Mane, Hitesh Vasiyani, Saranga MV, Nisha Chandak, Rajesh Singh. Exosomal miRNAs play a role in modulation of mitochondrial functions and cell death in Parkinson's Disease. *Mitochondrial Medicine – Therapeutic Development 2021 - VIRTUAL event*. Wellcome connecting science, Wellcome Genome Campus, UK, November 30 - December 02, 2021.
3. **Fatema Currim**, Anubhav Srivastava, Kritarth Singh, Milton Roy, Dhruv Gohel, Minal Mane, Meenakshi Iyer, Anjali Shinde, Hitesh Vasiyani, Rajesh Singh. The exosome release is enhanced during Parkinson disease stress conditions to regulate intercellular communication. XLII All India Cell Biology Conference and 2nd International Conference on Trends in Cell and Molecular Biology. BITS Pilani, Goa, India, December 21-23, 2018.

7.2 Publications from other associated projects during Ph.D. tenure

a. Research articles

1. Shukla S, **Currin F**, Singh J, Goyani S, Saranga MV, Shinde A, Mane M, Chandak N, Kishore S, Singh R. hsa-miR-320a mediated exosome release under PD stress conditions rescue mitochondrial ROS and cell death in the recipient neuronal and glial cells. *The International Journal of Biochemistry & Cell Biology*. 2023 Sep 1;162:106439.
2. Vasiyani H, Mane M, Rana K, Shinde A, Roy M, Singh J, Gohel D, **Currin F**, Srivastava R, Singh R. DNA damage induces STING mediated IL-6-STAT3 survival pathway in triple-negative breast cancer cells and decreased survival of breast cancer patients. *Apoptosis*. 2022 Dec;27(11-12):961-78.
3. Roy M, Singh K, Shinde A, Singh J, Mane M, Bedekar S, Tailor Y, Gohel D, Vasiyani H, **Currin F**, Singh R. TNF- α -induced E3 ligase, TRIM15 inhibits TNF- α -regulated NF- κ B pathway by promoting turnover of K63 linked ubiquitination of TAK1. *Cellular Signalling*. 2022 Mar 1;91:110210.
4. Vasiyani H, Shinde A, Roy M, Mane M, Singh K, Singh J, Gohel D, **Currin F**, Vaidya K, Chhabria M, Singh R. The analog of cGAMP, c-di-AMP, activates STING mediated cell death pathway in estrogen-receptor negative breast cancer cells. *Apoptosis*. 2021 Jun;26:293-306.
5. Shinde A, Jung H, Lee H, Singh K, Roy M, Gohel D, Kim HB, Mane M, Vasiyani H, **Currin F**, Seo YR. TNF- α differentially modulates subunit levels of respiratory electron transport complexes of ER/PR+ ve/- ve breast cancer cells to regulate mitochondrial complex activity and tumorigenic potential. *Cancer & Metabolism*. 2021 Apr 29;9(1):19.
6. Gohel D, Sripada L, Prajapati P, **Currin F**, Roy M, Singh K, Shinde A, Mane M, Kotadia D, Tassone F, Charlet-Berguerand N. Expression of expanded FMR1-CGG repeats alters mitochondrial miRNAs and modulates mitochondrial functions and cell death in cellular model of FXTAS. *Free Radical Biology and Medicine*. 2021 Mar 1;165:100-10.

b. Review article

1. Shukla S, **Currin F**, Singh R. Do different exosome biogenesis pathways and selective cargo enrichment contribute to exosomal heterogeneity?. *Biology of the Cell*. 2023 Jul;115(7):e2200116.