10.1 Publications from Ph.D. thesis work

a. Research articles

1. D. Gohel et al., “Expression of expanded FMR1-CGG repeats alters mitochondrial miRNAs and modulates mitochondrial functions and cell death in cellular model of FXTAS,” Free Radic. Biol. Med., vol. no. 165, pp. 100–110, 2021.

2. D. Gohel et al., “FMRpolyG alters mitochondrial transcripts level and respiratory chain complex assembly in Fragile X associated tremor / ataxia syndrome [FXTAS],” BBA - Mol. Basis Dis., vol. 1865, no. 6, pp. 1379–1388, 2019.

b. Review articles

1. D. Gohel, N. C. Berguerand, F. Tassone, and R. Singh*, “BBA - Molecular Basis of Disease The emerging molecular mechanisms for mitochondrial dysfunctions in FXTAS,” BBA - Mol. Basis Dis., vol. 1866, no. 12, p. 165918, 2020.

c. Conferences

Invited Talks/Platform Presentations

1. Gohel D, Roy M, Mane M, Currim F, Shinde A, Berguerand NC, Tassone F, and Singh R. Mito-miR, hsa-miR-320a modulates mitochondrial functions and cell death in FXTAS. 4th International conference on FMR1 premutation, Rotterdam, Netherlands, 25th -27th Sept 2019.

2. Gohel D, Sripada L, Prajapati P, Singh K, Roy M, Mane M, and Singh R. hsa-miR-4485, a mito-miR, regulates mitochondrial RNA processing and function. "Mitochondria at the crossroad", Winter school, Strasbourg, France, 3rd Dec 2017.

3. Gohel D, Sripada L, Prajapati P, Singh K, Roy M, Dalwadi P, Bhateliya K, and Singh R. In FXTAS, CGG repeats decreases cell viability and alters mitochondrial biogenesis and transcriptome. National Symposium on Omics.. to Structural Basis of Disease. 30th Sept – 1st Oct 2016.

Poster Presentations

1. Gohel D, Wojtas B, Sripada L, Singh K, Roy M, Kotadia D, Shinde A, Srivastava A, Currim F, Iyer M, Mane M, Kaminska B, Singh R. Systemic analysis of differentially associated miRNAs at mitochondria in brain cells of ischemic rat model. NGBT-2018 conference, Jaipur, Rajasthan, India, 29th Sep- 2nd Oct 2018.

2. Gohel D, Sripada L, Roy M, Singh K, Prajapati P, Dalwadi P, Bhatelia K, Berguerand NC, Sellier C, Singh R. FXTAS, a CGG repeats associated disorder: Alteration in mitochondrial functions and Cellular viability. XL All India Cell Biology conference, Gwalior, India, 17th – 19th Nov 2016.

3. Gohel D, Acharya N, Natesan S, Kuberkar V. Chemo-sensitivity testing of anticancer drugs for identifying most efficacious chemotherapy agents. Diamond Jubilee celebration, Department of Biochemistry, MSU, Vadodara, India, 15th – 17th Dec 2014.

10.2 Publications from other associated projects

a. Research articles

1. Gohel D, Rajan W, Wojtaz B, Kaminska B and Singh R*," Altered trafficking of mito-miRNAs at mitochondria modulates mitochondrial functions and cell death in brain ischemia,"(Manuscript under preparation)

2. Vasiyani H, Shinde A, Roy M, Mane M, Singh K, Singh J, Gohel D, Currim 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 (Ahead of print).

3. F. Currim, J. Singh, A. Shinde, D. Gohel, R. Singh*, "Exosome Release Is Modulated by the Mitochondrial-Lysosomal Crosstalk in Parkinson's Disease Stress Conditions," Molecular Neurobiology, vol. 165, pp. 100–110, 2021.

4. P. Prajapati, D. Gohel, A. Shinde, M. Roy, K. Singh, and R. Singh*, "TRIM32 regulates mitochondrial mediated ROS levels and sensitizes the oxidative stress induced cell death," Cell. Signal., vol. 76, p. no. 109777, 2020.

5. P. Prajapati, P. Dalwadi, D. Gohel, K. Singh, L. Sripada, and K. Bhatelia, R. Singh*, "Enforced lysosomal biogenesis rescues erythromycin - and clindamycin - induced mitochondria - mediated cell death in human cells," Mol. Cell. Biochem., vol. no. 461, pp. 23-36, 2019.

6. Singh K, Roy M, Prajapati P, Lipatova L, Sripada L, Gohel D, Singh A, Mane M, Goddbole M, Chumakov PM, Singh R*, "NLRX1 regulates TNF-α-induced mitochondria-lysosomal crosstalk to maintain the invasive and metastatic potential of breast cancer cells." BBA - Mol. Basis Dis., vol. 1865, no. 6, pp. 1460–1476, 2019.

7. Singh K, Sripada L, Lipatova A, Roy M, Prajapati P, Gohel D, Bhatelia K, Chumakov P M, Singh R*, 'NLRX1 resides in mitochondrial RNA granules and regulates mitochondrial RNA processing and bioenergetic adaptation,', Biochimica et Biophysica Acta (BBA) – Molecular Cell Research, vol. 1865, no. 9, pp. 1260-1276, 2018.

8. Roy M, Tomar D, Singh K, Sripada L, Prajapati P, Bhatelia K, Gohel D, Singh R*, "TRIM8 regulated autophagy modulates the level of cleaved Caspase-3 subunit to inhibit genotoxic stress induced cell death" Cellular Signalling, vol. no. 48, pp. 1-12, 2018.

9. Acharya N, Gohel D, Kuberkar V, and Natesan S*, "Recent Advances in Immunotherapy for the Treatment of Cancer," Adv. Anim. Vet. Sci., vol. 3, pp. 23–29, 2015.

b. Review articles

1. D. Gohel and R. Singh*, "Mitohormesis; Potential implications in neurodegenerative diseases," Mitochondrion, vol. no. 56, pp. 40–46, 2021