List of publication

A. PUBLICATIONS FROM PH.D. THESIS WORK

a. Research Articles:

- 1. Sripada L, Tomar D, Prajapati P, Singh R, Singh A, Singh R, Systematic analysis of small RNAs associated with human mitochondria by deep sequencing: detailed analysis of mitochondrial associated miRNA, PLoS One, 7 (2012) e44873.
- Sripada L, Singh K, Poteryakhin A, Singh A, Prajapati P, Tomar D, Bhatelia K, Roy M, Singh R, Godbole M, Chumakov P, Singh R. hsa-miR-4485 regulates mitochondrial functions and inhibits tumorigenicity of the breast cancer cells. Jo Mol Med. 10.1007/s00109-017-1517-5
- 3. Sripada L, Singh K, Dalwadi P, Roy M, Singh A, Prajapati P, Singh R. hsa-miR-320a associates with mitochondria, regulates mitochondrial complex-I assembly and activity to regulate cellular survival. (manuscript under communication)
- 4. L. Sripada L, Singh K, Prajapati P, Gohil D, Roy M, Singh R, 293m80059, a novel miRNA associates with mitochondria and regulates ND2 mRNA processing. (manuscript under preparation)

b. Review Article:

1. Sripada L, Tomar D, Singh R, Mitochondria: one of the destinations of miRNAs, Mitochondrion, 12 (2012) 593-599.

c. Poster Presentation in National and International Conference:

Platform Presentation:

- Sripada L, Tomar D, Prajapati P, Jain M, Singh R, Singh AK, Singh R. Systematic analysis of small RNA associated with human mitochondria. 2nd Annual Conference of Society for Mitochondrial Research and Medicine-India "Mitochondria in Health and Disease". Central University of Gujarat, Gandhinagar, India, November 2-3, 2012
- 2. Sripada L, Prajapati P, Bhatelia K, Tomar D, Singh K, Singh AK, Singh R. "miRNA sequences aligns with mitochondrial genome, associates with mitochondria, alters in stress and modulates mitochondrial functions in various physio-pathological conditions." 38th Mahabaleshwar Seminar on Mitochondria, Metabolism and

Energetics organized by Tata Institute of Fundamental Research, Mumbai, Maharashtra, India, January 27-30, 2014. **Best poster selected for Short Talk.**

Poster Presentations:

- Sripada L, Prajapati P, Bhatelia K, Singh k, Singh R, Singh R. "hsa-miR-320a associates with human mitochondria and modulates its function and cell death". Three day National Symposium on EMERGING TRENDS IN BIOCHEMICAL SCIENCES, Diamond Jubilee Celebration, Department of Biochemistry 29-31 DECEMBER, 2014
- 2. Sripada L, Prajapati P, Tomar D, Singh K, Bhatelia K, Singh R. "hsa-miR-4485, mitochondria associated miRNA affects mitochondrial functions and cell death in Parkinson's Disease." Joint 7th Asian-Pacific Organization for Cell Biology congress and American Society for Cell Biology workshop on infectious diseases, at Biopolis, Singapore from 24 to 27 February 2014. Abstract selected to receive the travel award, sponsored by the International Federation of Cell Biology.
- **3.** Sripada L, Prajapati P, Bhatelia K, Tomar D, Singh K, Singh AK, Singh R. "hsa-miR-4485, a tumor suppressor miRNA, associates with human mitochondria by targeting mitochondrial GPD2." The XXXVII All India Cell Biology Conference on Cell Dynamics and Cell Fate, National Centre for Biological Sciences, Bangalore, Karnataka, India, December 22- 24, 2013. **Best poster award.**
- 4. Sripada L, Prajapati P, Singh K, Tomar D, Singh R, Singh AK, Singh R. "Effect of mitochondria associated miRNA, hsa-miR-4485 on 6-OHDA induced cell death in SHSY-5Y" SMRM 3rd Annual Conference on Mitochondria in Health and Disease, National Institute of Mental Health and Neuro Sciences, Bangalore, Karnataka, India.
- Sripada L, Tomar D, Prajapati P, Singh R, Singh AK, Singh R. Mitochondria: Preferred site of mature miRNA. SMRM 1st Annual Conference on "Mitochondria in Biology and Medicine, Centre for Cellular and Molecular Biology, Hyderabad, Andhra Pradesh, India, December 9-10, 2011

d. GEO SUBMISSION: GSM797669 and GSM797670

B. PUBLICATIONS FROM OTHER ASSOCIATED PROJECTS DURING PH.D. TENURE

a. Research Articles:

- 1. Prajapati P, Sripada L, Singh K, Roy M, Bhatelia K, Dalwadi P, Singh R. Systemic analysis of miRNAs in PD stress conditions: miR-5701 modulates mitochondriallysosomal cross talk to regulate cell death. (manuscript under revision)
- 2. Prajapati P, Dalwadi P, Sripada L, Singh K, B Joshi B, K Bhatelia K, M Roy M, Singh R, Singh R. Enforced lysosomal biogenesis rescues Erythromycin and Clindamycin induced mitochondria mediated cell death in human cells. (Cell Signal. 2017 Mar 31;35:73-83)
- 3. Bhatelia K, Singh K, Prajapati P, Sripada L, Roy R, Singh R. MITA modulates autophagy flux and regulate cell death in breast cancer cells (manuscript under revision in Cellular Signalling)
- Singh A, Chagtoo M, Tiwari S, George N, Chakravarti B, Khan K, Sripada L, Godbole M. Inhibition of Inositol 1, 4, 5-trisphosphate Receptor Induce Breast Cancer Cell Death through Deregulated Autophagy and Cellular Bioenergetics DOI: 10.1002/jcb.25891
- 5. Tomar D, Prajapati P, Lavie J, Singh K, Sripada L, Bhatelia K, Roy M, Singh R, Bénard G, Singh R. TRIM4; a novel mitochondrial interacting RING E3 ligase, sensitizes the cells to hydrogen peroxide (H 2 O 2) induced cell death, Free Radical Biology and Medicine, (2015). S0891-5849(15)01096-5.
- 6. Singh K, Poteryakhina A, Zheltukhin A, Bhatelia K, Prajapati P, Sripada, Tomar D, Singh R, Singh A, Chumakov P, Singh R, NLRX1 acts as tumor suppressor by regulating TNF-alpha induced apoptosis and metabolism in cancer cells, Biochim Biophys Acta, 1853 (2015) 1073-1086.
- 7. Prajapati P, Sripada L, Singh K, Bhatelia K, Singh R, Singh R, TNF-alpha regulates miRNA targeting mitochondrial complex-I and induces cell death in dopaminergic cells, Biochim Biophys Acta, 1852 (2015) 451-461.
- 8. Bhatelia K, Singh A, Tomar S, Singh K, Sripada L, Chagtoo M, Prajapati P, Singh R, Godbole M, Singh R, Antiviral signaling protein MITA acts as a tumor suppressor in breast cancer by regulating NF-kappaB induced cell death, Biochim Biophys Acta, 1842 (2014) 144-153.

- 9. Tomar D, Prajapati P, Sripada L, Singh K, Singh R, Singh A, Singh R, TRIM13 regulates caspase-8 ubiquitination, translocation to autophagosomes and activation during ER stress induced cell death, Biochim Biophys Acta, 1833 (2013) 3134-3144.
- 10. Tomar D, Sripada L, Prajapati P, Singh R, Singh A, Singh R, Nucleo-cytoplasmic trafficking of TRIM8, a novel oncogene, is involved in positive regulation of TNF induced NF-kappaB pathway, PLoS One, 7 (2012) e48662.
- 11. Singh A., Pooja P., Tomar D., Singh R., Sripada L., Prajapati P., Singh K., Singh R. TBK1 regulates p62/sqstm1 mediated autophagic clearance of intracellular ubiquitinated Staphylococcus aureus in human epithelial cells. (Accepted in Translational Genetics and Genomics)

b. Review Article:

1. Singh R, Sripada L, Singh R, Side effects of antibiotics during bacterial infection: mitochondria, the main target in host cell, Mitochondrion, 16 (2014) 50-54.

c. Poster Presentation in National and International Conference:

Platform Presentations:

- Tomar D, Prajapati P, Sripada L, Singh R, Singh AK, Singh R. TRIM13 regulates ER stress induced cell death via autophagy induction and caspase-8 activation. 2nd Annual Conference of Society for Mitochondrial Research and Medicine-India "Mitochondria in Health and Disease". Central University of Gujarat, Gandhinagar, India, November 2-3, 2012.
- Tomar D, Sripada L, Prajapati P, Singh R, Singh AK, Singh R. Nucleo-cytoplasmic translocation of TRIM8 is essential for positive regulation of TNF induced NF-κB pathway. 1st International Meet On Advance Studies in Cell Signaling Network, CSIR- Indian Institute of Chemical Biology, Kolkata, India, September 11-13, 2012.
- 3. Tomar D, Roy M, Prajapati P, **Sripada L**, Singh K, Singh R. "Autophagy mediated protection from cell death during genotoxic stress; role of TRIM8, a RING family ubiquitin E3 ligase" International Symposium On Conceptual Advances in Cellular Homeostasis Regulated by Proteases and Chaperones The Present, The Future and

Impact on Human Diseases, ACTREC, Tata Memorial Centre, Kharghar, Navi Mumbai, Maharashtra, India.

Poster Presentations:

- Prajapati P, Tomar D, Sripada L, Singh K, Singh R, Singh R. "TRIM32 regulates oxidative stress induced cell death." The XXXVII All India Cell Biology Conference on Cell Dynamics and Cell Fate, National Centre for Biological Sciences, Bangalore, Karnataka, India, December 22- 24, 2013
- 2. Bhatelia K, Singh A, Tomar D, Singh K, **Sripada L**, Chagtoo M, Prajapati P, Singh R, Godbole MM, Singh R. "MITA regulates cell death in breast cancer cells" The XXXVII All India Cell Biology Conference on Cell Dynamics and Cell Fate, National Centre for Biological Sciences, Bangalore, Karnataka, India, December 22- 24, 2013
- 3. Prajapati P, **Sripada L**, Tomar D, Singh R, Singh AK, Singh R. "TNF treatment in SHSY-5Y effects miRNA expression and induces mitochondrial impairment and cell death" SMRM 3rd Annual Conference on Mitochondria in Health and Disease, National Institute of Mental Health and Neuro Sciences, Bangalore, Karnataka, India.
- 4. Singh AK, Patel P, **Sripada L**, Singh R, Singh K, Tomar D, Singh R. S. aureus infection enhances mitochondrial biogenesis in human epithelial cells. SMRM 3rd Annual Conference on Mitochondria in Health and Disease, National Institute of Mental Health and Neuro Sciences, Bangalore, Karnataka, India.
- 5. Singh K, Bhatelia K, Prajapati P, **Sripada L**, Tomar D, Singh R, Chumakov PM, Singh R. "NLRX1 regulates TNF-α induced ROS production by modulating mitochondrial Complex III and Caspase-8 activity in breast cancer cells." SMRM 3rd Annual Conference on Mitochondria in Health and Disease,National Institute of Mental Health and Neuro Sciences, Bangalore, Karnataka, India. **Best poster award.**
- 6. Bhatelia K, Singh A, Tomar D, Singh K, **Sripada L**, Chagtoo M, Prajapati P, Singh R, Godbole MM, Singh R. "MITA, ER localized Interferon Regulator, acts as a tumor suppressor in breast cancer" SMRM 3rd Annual Conference on Mitochondria in Health and Disease, National Institute of Mental Health and Neuro Sciences, Bangalore, Karnataka, India.
- 7. Tomar D, Prajapati P*, **Sripada L**, Singh K, Roy M, Singh R, Singh AK, Singh R. "TRIM13 negatively regulates TNF induced NF-κB signaling and suppresses clonogenic ability of the cells". International Conference on Recent Advances in "Cancer Prevention and Therapeutics". School of Life Sciences, Central University of

- Gujarat, Gandhinagar, India, November 19-20, 2013. **Best poster award.** *Presenting Author
- 8. Singh K, Tomar D, Prajapati P, Sripada L, Bhatelia K, Singh AK, Singh R, Chumakov PM, Singh R. The role of mitochondrial protein NLRX1 in regulation of TNF induced ROS and inflammation. 2nd Annual Conference of Society for Mitochondrial Research and Medicine-India "Mitochondria in Health and Disease". Central University of Gujarat, Gandhinagar, India, November 2-3, 2012. Best poster award.
- 9. Singh AK, Patel P, Singh R, Prajapati P, Tomar D, Sripada L, Singh K, Singh R. Mitochondrial ROS negatively regulates intracellular survival of S. aureus in human epithelial cells. 2nd Annual Conference of Society for Mitochondrial Research and Medicine-India "Mitochondria in Health and Disease". Central University of Gujarat, Gandhinagar, India, November 2-3, 2012. Best poster award
- 10. Bhatelia K, Singh K, Tomar D, **Lakshmi S**, Prajapati P, Singh R. MITA induces cell death by regulation of NF-κB in MCF-7 breast cancer cell line. XXXVI All India Cell Biology Conference & International Symposium On "Stress Adaptive Response and Genome Integrity", Bhabha Atomic Research Centre, Mumbai, India, October 17-19, 2012.
- 11. Jain M, Prajapati P, Tomar D, Sripada L, Singh R, Singh AK, Singh R. TNF induces cell death in autophagy dependent manner in cell line model of Parkinson Diseases.
 1st International Meet On Advance Studies in Cell Signaling Network, CSIR- Indian Institute of Chemical Biology, Kolkata, India, September 11-13, 2012.
- 12. Tomar D, Singh R, **Sripada L**, Prajapati P, Singh AK, Singh R. TRIM13, regulates a novel RING E3 ligase regulates NF-κB pathway and clonogenic/migration ability of the cells. International Symposium on Cancer Biology, National Institute of Immunology, New Delhi, India, November 14-16, 2011. **Best poster award**