## LIST OF FIGURES

CHAPTER-2 Figure 2.1. Figure 2.2. Figure 2.3. Figure 2.4. Figure 2.5.	Structure and functions of mitochondria and associated physio-pathology.  Nuclear – Mitochondrial crosstalk.  Nuclear control over mitochondrial proteome.  Import of nuclear encoded non coding RNA into the mitochondria.  miRNA biogenesis pathway, associated factors and the outcome.
CHAPTER-5 Figure 5.1. Figure 5.2. Figure 5.3. Figure 5.4. Figure 5.5. Figure 5.6. Figure 5.7. Figure 5.8	Quality assessment of mitochondrial RNA.  Analysis of purity of RNA isolated from mitochondria.  Generation and analysis of sRNA sequences from mitochondria.  The genomic mapping of mitochondria associated sRNAs.  Classification of repeat associated reads from mitochondria-associated sRNA libraries.  Analysis of differential association of miRNAs to mitochondria from HEK293 and HeLa.  Validation of miRNAs and their targets associated with mitochondria.  Association of human Argonaute with mitochondria. Argonaute proteins co-localizes with mitochondria.
CHAPTER-6 Figure 6.1. Figure 6.2. Figure 6.3. Figure 6.4. Figure 6.5. Figure 6.6. Figure 6.7. Figure 6.8.	Analysis of putative novel miRNAs associated with human mitochondria Association of novel miRNAs with high count at mitochondria.  Association of novel miRNAs targeting mitochondria.  miR-293m80059 undergoes canonical processing and associates with mitochondria.  miR-293m80059 regulates mitochondrial function.  miR-293m80059 regulates mitochondrial complex-I assembly.  miR-293m80059 regulates ND2 processing  miR-293m80059 potentiates cell death.
CHAPTER-7 Figure 7.1. Figure 7.2. Figure 7.3. Figure 7.4.  Figure 7.5. Figure 7.6. Figure 7.7. Figure 7.8. Figure 7.9. Figure 7.10. Figure 7.11.	Mapping sRNAs to human mitochondrial genome.  Genomic localization of miR-4485. miR-4485 associates with human mitochondria.  Nuclear transport and processing is required for association of miR-4485 with mitochondria.  miR-4485 regulates mitochondrial RNA processing and translation. miR-4485 regulates mitochondrial functions in MCF-7. miR-4485 regulates mitochondrial function, ROS and cell death.  Inhibition of miR-4485 regulates mitochondrial functions. miR-4485 expression alters putative target transcripts. miR-4485 negatively regulates tumorigenic potential of breast cancer cells.  Inhibition of miR-4485 increases tumorigenic potential.
CHAPTER-8 Figure 8.1. Figure 8.2. Figure 8.3. Figure 8.4. Figure 8.5. Figure 8.6. Figure 8.7.	Association of Ago2 and miRNA with mitochondria alters in cell death. miR-320a associates with mitochondria in presence of TNF-α. miR-320a modulates mitochondrial functions. miR-320a regulates mitochondrial complex-I assembly. miR-320a regulate its target at mitochondria. miR-320a potentiates ROS mediated cell death. miR-320a negatively regulates ROS mediated tumorigenic potential of breast cancer cells.