Extracellular vesicles and miRNA export

What they are, formation mechanisms (mention lipid raft involvement. Introduce miRNA)

Why are they important (transfer functional miRNA, proteins. Metastasis, other disease?)

What is still unknown ie. What you want to find out

Experimental system:

PC3 cells.

Cavin and caveolin

Significance: fundamental cell biology (current thought is that exosomal miRNA simply represent a snapshot of cellular miRNA), cancer and other disease with lipid raft/cholesterol de-regulation.

Extracellular vesicles are cell-derived lipid bound vesicles that house proteins and RNAs, including messenger and microRNAs, originating from the host cell.