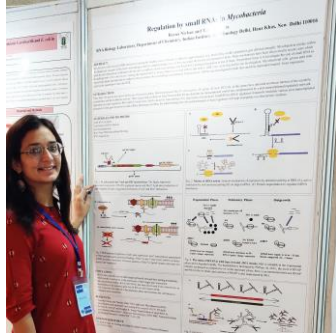




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Research Interest

Regulation by small RNAs in Bacteria

Research Area

Regulatory role played by small RNAs in *Mycobacteria*

Research Interest

Drug designing against *Mycobacterium tuberculosis*
Peptidyl tRNA Hydrolase and tRNA repair in bacteria

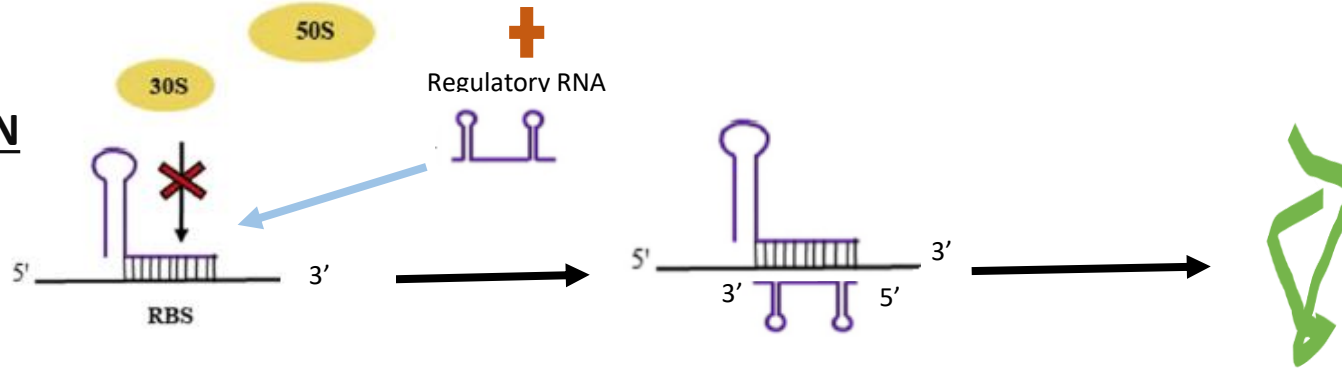
Mycobacteria tuberculosis, causative agent of the deadly disease Tuberculosis. Approximately one-third of the world's population gets affected by this annually. *Mycobacteria* resides within the phagocytic vacuoles of the host's macrophages and has adapted unique ways of thriving under their hostile environment.

Mycobacterium undergoes many stresses during the course of transmission, infection and immune response attack. For survival under such harsh conditions, it needs an extensive regulation of gene expressions. Many mechanisms have been discovered in recent years which helps the *Mycobacteria* to withstand the stress conditions inside macrophages. Small RNA mediated regulation is one of them which can activate or repress the gene expression. Our main focus is to study this regulatory role played by small RNAs in the pathogenesis of *Mycobacterium tuberculosis*.

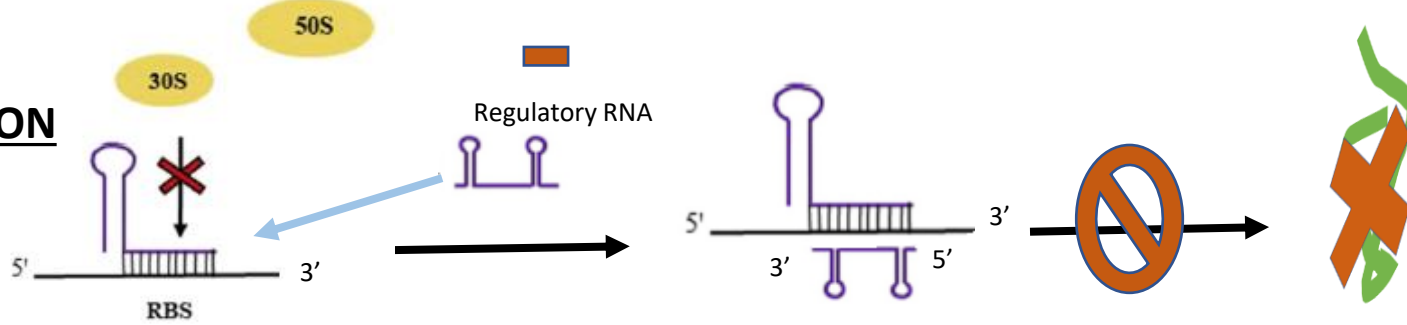
pH stress

Oxidative stress

ACTIVATION



REPRESSION



Nutrient limitation

Toxins