"Creating teams for Indian viral sequences based nucleic acid vaccine systems"

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I will first describe the core questions that our group addresses and highlight a recent review.

Rodrigues, C., Joy, R. L., Sasikala. P. S. & Krishna, S. (2019) Notch signaling in cervical cancer.  ***Experimental Cell Research: Review.***

https://doi.org/10.1016/j.yexcr.2019.111682

I will then allude very briefly to various independent programs in the group which span from DNA tumor viruses, metagenomics to marine ecology. The diversity and inter-disciplinarity has allowed us to support Indo-African pathogen sequencing efforts and essentially be an umbrella for emerging “one health” approaches.

The specific focus of the talk will be on our program supported by Narayana Murthy which has enable us to sequence Dengue viruses from across India on a modest scale, convert this into bio-informatics pipelines and design consensus vaccines. We have tested these vaccines in initial experiments in murine systems using plasmid DNA delivery vectors.

The broader implication of this work is with the emergence of nucleic acid delivery systems for covid vaccines, is the creation of a Indo-African viral vaccine resource with across the breath capabilities.