Public Abstract
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Title: DEFINITION OF VPU SENSITIVITY USING A MODEL VPU TARGET AND ROLE OF HYDROPHOBICITY OF THE MEMBRANE SPANNING DOMAIN IN THE VIRAL ENVELOPE GLYCOPROTEIN FUSOGENICITY

Human Immunodeficiency Virus (HIV) has affected millions of people across the traditional boundaries of race, sex, religion, color, caste and creed. Despite tremendous progress in our understanding of this viral pathogen, a cure is not in sight. Multiple avenues are being pursued to help us evade and conquer HIV. In this body of work, we try to understand how HIV acquires a viral glycoprotein, a protein which directs the virus towards specific cells and tissues in the body.

This work outlines some of the physical factors involved in HIV acquiring a viral glycoprotein. By understanding this mechanism, it is possible to alter levels of the glycoprotein in the virus and hence drive towards a cure for HIV. Further, understanding the molecular mechanism would allow us to design efficient viral vectors for gene therapy.