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NTU Researchers Unearth New Insights into Infectious Diseases



In the ceaseless battle against infectious diseases, the shadows of lower respiratory tract infections, malaria, and the looming menace of drug-resistant infections persistently darken the global health landscape. A recent review emphasizes the relentless impact of these diseases, particularly in developing nations. The amplifying effect of climate change on insect-transmitted diseases such as malaria and dengue only adds grist to the mill of growing concerns.

Unraveling the Enigma of Infectious Diseases

In this daunting landscape, researchers from Nanyang Technological University (NTU) have been making strides in understanding and combating infectious diseases. One significant breakthrough, documented in the journal *Virology* in January 2023, shed light on the intricate workings of the respiratory syncytial virus (RSV). The study demonstrated how the small hydrophobic (SH) protein of RSV facilitates infection and obstructs the immune response. This revelation opens up the possibility of new treatments targeting the SH protein, a major player in viral pneumonia in young children.

Deciphering the Chikungunya Virus

Another landmark study from NTU, published in *Science Advances* in November 2022, utilized cryo-electron microscopy to unveil the replication complex (RC) of the Chikungunya virus. This insight could be pivotal in the development of antiviral drugs for various infections.

Unmasking the Malaria Parasite

A study published in *Nature Communications* in July 2022 brought to light another significant discovery. The research explained how the malaria parasite cunningly evades the immune system. The var2csa protein on the parasite's surface assists in eluding detection by white blood cells, making the parasite a formidable adversary. These discoveries underscore the paramount importance of relentless research in infectious diseases to develop more effective treatments and tackle the evolving challenges posed by these diseases.

<https://bnn.network/breaking-news/health/ntu-researchers-unearth-new-insights-into-infectious-diseases/#:~:text=NTU%20Researchers%20Unearth%20New%20Insights%20into%20Infectious%20Diseases&text=In%20the%20ceaseless%20battle%20against,darken%20the%20global%20health%20landscape.>