

THSTI's work on HIV prevention and therapy receives a boost from Wellcome DBT India Alliance

By Dr. Bilqeesa Bhat

An interdisciplinary collaborative research team headed by Dr. Jayanta Bhattacharya from the Translational Health Science and Technology Institute (THSTI), India has got grant award from Wellcome DBT India Alliance for development of novel monoclonal antibodies for human immunodeficiency viruses (HIV) prevention and treatment.

The integrated disease management approaches are increasingly promoted as a means of improving effectiveness and capability of healthcare for chronic diseases such as HIV/AIDS. Novel anti-HIV broadly neutralizing monoclonal antibodies (bnAbs) hold promise in the prevention and treatment of HIV-1 infection.

The bnAbs play a protective role by preventing the HIV virus's entry by interfering with its binding with the receptor present on the host cell. These antibodies are called "broadly neutralizing" as they act against several of the sub-populations of HIV.

Furthermore, to develop effective bnAbs-based preventive and therapeutic solution for HIV, it is also critical to assess people living with HIV (PLHIV) categorized into different risk groups. The HIV lab at THSTI, India has undertaken a project to assess the potential of such novel bnAbs for prevention and therapy in the Indian subtype C viruses.

The team scientist from different clinical research centres located across the world aims at developing broadly neutralizing monoclonal antibody based prevention and treatment strategy by assessing their effectiveness in neutralizing HIV-1 subtype C circulating in India across different regions and distinct risk groups.

The THSTI, Faridabad is partnering with the National Institute for Research in Reproductive Health (ICMR- NIRRH), Mumbai; Y R Gaitonde Center for AIDS Research & Education (YRG CARE), Chennai; T N Medical College & B Y L Nair Hospital, Mumbai; Calcutta School of

Tropical Medicine, Kolkata; AIDS Vaccine Research & Development, Duke University Medical Center, Durham, North Carolina, USA and the Neutralizing Antibody Center at the Scripps Research Institute, La Jolla, California, USA.

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