Researchers sequencing Ebola virus in hope of finding cure

Gene sequencing equipment maker Illumina has teamed up with the U.S. government and academic researchers at the Broad Institute in Boston to train scientists in West Africa to improve tracking of how the Ebola virus is mutating in hopes of fighting it more effectively.

The public-private partnership, announced on Wednesday, is designed to extend research on how the Ebola virus is mutating in real time as it spreads among populations in West Africa. Scientists need the information to develop new diagnostics, drugs and vaccines to fight the outbreak.

Sequencing and patient monitoring facilities will be created first in Liberia, Nigeria, Senegal, and Sierra Leone, and over the longer term in other West African countries, the groups said in a statement. These centers will serve as hubs for the deployment of mobile laboratories to remote districts where large-scale capacity is not available.

Illumina, the U.S. Agency for International Development and researchers at the Broad Institute of Harvard University and the Massachusetts Institute of Technology will train and equip the facilities with state-of-theart genome sequencing technology. The value of Illumina's investment was not disclosed.

Scientists have expressed frustration that they are unable to gain access to blood samples from Ebola patients needed for this kind of research.

A team of researchers led by Pardis Sabeti from the Broad Institute has been working with collaborators in Nigeria, Senegal and Sierra Leone for several years, training them to use sequencing and diagnostic technology. In August, Sabeti and colleagues published a study in the journal Science of some of the earliest cases in Sierra Leone. It suggested that the virus is mutating quickly and in ways that could affect current diagnostics and future vaccines and treatments.

The new pact will allow researchers to do similar work in Liberia, the country hit hardest by the outbreak.

Read full, original article: Illumina teams with U.S. government, researchers to sequence Ebola