Boston University Medical Campus

Community Liaison Committee (CLC)

National Emerging Infectious Diseases Laboratories (NEIDL)

MEETING NOTES

Thursday April 2, 2020

2:30 pm. * Zoom

ATTENDING

Scarlet P.M. Ford, CLC; J. Kevin Fisher, CLC; Jean Lee, CLC; Joe Lillis, CLC; Vanessa Hackett, CLC; Kenneth Nwosu, CLC; Jim Keeney, CLC; Valeda Britton, GCA, BU; Chimel Idiokitas, GCA, BU; Erika Curry, GCA, BU; Elizabeth Leary, GCA, BU; James Curley, GCA, BU; James Sullivan, GCA, BU; Cecilia Nardi, GCA, BU; Dr. Ronald Corley, Director, NEIDL

Meeting opened at 2:35pm

NEIDL Director Update by Dr. Ron Corley:

NEIDL Efforts on COVID-19:

Today BU/NEIDL thanked the members of the NEIDL Community Liaison Committee (CLC) for their support, and advocacy for NEIDL operations and activities. The CLC attended a Zoom session with Dr Corley, the Director of the NEIDL to ask questions, correct misinformation, voice concerns and discuss Covid- 19 current and future research at the NEIDL. The CLC thanked the NEIDL for its commitment to developing therapeutics, vaccines and treatments for Covid- 19 and other infectious diseases.

Dr Corley acknowledged the foresight of the NIH early on in building facilities and staffing with appropriate expertise to work safely doing basic research with pathogens such as Covid- 19. He mentioned that several NEIDL investigators have submitted protocols to work with the coronavirus and are waiting for approvals from the BPHC. He appreciates the BPHC's willingness to meet online and move protocols forward. To date, both Dr Davey and Dr Griffiths are among several NEIDL investigators that have received approvals. Dr Davey will be screening drugs to use against infected cells to see which drugs can interfere with or block the virus. Dr. Griffiths has been asked by our affiliate hospital, BMC, to test whether vaporized hydrogen peroxide can kill Covid- 19 on masks. The results of this test should be known by Monday and if effective, will be vital in keeping those on the front lines safer.

Dr Corley mentioned that the NEIDL received islets of the COVID-19 virus from Washington and is now working with the virus at BSL-3 & BSL-4 because there is available space in the building.

In response to a question from a CLC member about collaborative efforts and NEIDL clinical trials, Dr. Corley noted that all research at the NEIDL on Covid- 19 are pre-clinical studies. We are working collaboratively with other BU departments and are a member of the Massachusetts Consortium on Pathogen Readiness to understand how the coronavirus infects cells and leads to Covid- 19. Our relationship with the BU Center for Regenerative Medicine (CReM) has been useful in the development of 3D lung organoids. In addition, the NEIDL is working with Harvard to use humanized mice. They will infect the mouse with a lung infection and then COVID to see how the lung responds. They are exploring what type of immune response makes antibodies and whether these antibodies are useful in protecting you if you get the virus. Also, we receive

and share information with the other research labs that are members of our NBL/RBL Network. Recently, we had a Zoom session with other Network Directors to discuss coronavirus efforts, and expertise. These types of conversations are very useful.

Another member of the CLC asked whether anti-malaria drug will be effective against Covid- 19? — Dr Corley stated that many drugs, including antimalarial drugs affect the cells pathways. If you interfere with the pathway, it may be possible to slow down the growth of the virus. The NEIDL will look into these drugs as well as other drugs.

One member asked what makes the COVID-19 virus so infectious? Coronaviruses are all respiratory. In the case of SARS and MERS, they effect the lower lung first, then the upper respiratory system. MERS and SARS have been easier to quarantine and contact trace. COVID-19 seems to affect the upper respiratory system very early so a person does not need to be exposed to a lot of virus particles to be infected. Remember each sneeze can pass 10, 000 particles. In addition, given the lack of or rationing of diagnostic kits for testing it is believed that someone that is asymptomatic may be able to spread the virus.

In response to the question about whether warmer weather will kill the virus, no one is certain. While there appear to be fewer cases in Africa and South America, Dr. Corley believes that this is due to less air traffic. There was far more air traffic between the USA, Europe, and China early on, which increased the exposure rate. It was noted that places such as Florida and other Southern states as well as Mexico City are seeing a high number of cases.

Dr. Corley said that there are more questions about Covid- 19 than answers and the Internet contains a lot of false information. He anticipates that this will be a long-term epidemic in the United States. 70% of the population will need to be immune in order for true herd immunity. In the meanwhile, we must continue to wash our hands, maintain social distancing, avoid large gatherings, protect our older members of society and be considerate of our friends, families and neighbors.

Meeting adjourned