

# Boston University Medical Campus

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## Community Liaison Committee (CLC)

National Emerging Infectious Diseases Laboratories (NEIDL)

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### MEETING NOTES

Tuesday, October 28, 2014

6:00 pm. \* 650 Albany Street rm. L714

### ATTENDING

Linda Lukas, Co-Chairperson, CLC; Dolly Battle, CLC; Jim Keeney, CLC; Kenneth Nwosu, CLC; Robert Timmerman, CLC; Valeda Britton, Executive Director, Community Relations/MED, BU; Chimel Idiokitas, Assistant Director, Community Relations/MED, BU; Elizabeth Leary, Director, Community Relations/CRC, BU; Dr. Thomas B. Kepler, Professor, Department of Microbiology, Department of Mathematics and Statistics, BU School of Medicine, NEIDL Investigator; Dr. Ronald Corley, Director, NEIDL; Kevin Tuohey, Executive Director, Research Compliance; At 6:00 pm, Co-Chair Lukas opened the meeting.

### PRESENTATIONS

Antibodies, Vaccines, and Computers presentation by Dr. Kepler

Eighty percent of Dr. Kepler's time is spent on vaccine development and most of the vaccines that are in use today focus on making antibodies work more effectively. Dr. Kepler discussed the role of antibodies in the immune system's fight against infections. The immune system recognizes viruses, bacteria, or parasites in your body and either neutralizes or eliminates them to keep them from reproducing. It does this in part by producing antibodies. Antibodies are protein molecules in the blood that bind to viruses and bacteria.

Dr. Kepler and his team study antibodies by using math and computers along with blood samples from people who have been vaccinated against Anthrax or are sick with HIV. By determining the DNA sequences of millions of antibodies from each blood sample, he is able to follow the antibodies as they mutate and multiply. Some of these mutations allow the antibodies to neutralize different forms of HIV as it, too, evolves. He believes his research will lead to more effective vaccines that produce antibodies earlier and faster in response to diseases.

Also, Dr. Kepler is studying bat genomes and looking at bat antibodies. He is interested in their immune system. Bats are a host for many diseases such as Marburg and possibly Ebola. Rabies is another bat virus. In most cases, these diseases cause little or no harm to the bats, but can be fatal in humans. We hope to gain an understanding of how bats are able to survive Marburg virus infections, and use this knowledge to make better medicines and vaccines for viral infections and people.

## **ADMINISTRATIVE**

The minutes of the October CLC meeting were unanimously approved.

## **INSTITUTIONAL BIOSAFETY COMMITTEE (IBC) REPORT**

Mr. Keeney and Mr. Timmerman gave IBC updates. There was a training session on the updates to the Dual Use Research of Concern policy. There were two lab incidents. Mr. Keeney was a secondary reviewer on two protocols. One protocol involved the effects of HIV on the aging process of the immune system. Mr. Timmerman reviewed a study on the benefits of coffee in combatting liver cancers.

## **SCIENTIFIC & RESEARCH UPDATE**

Dr. Corley explained that while Ebola is dominating the news, Enterovirus 68, continues to be a concern with outbreaks in both Europe and the US. Enterovirus 68 is a respiratory virus that has sickened thousands of children in recent months. Some children have polio like symptoms. At least, five children have died.

Dr. Corley discussed MERS and mentioned that camels are carriers of MERS. One fourth of all cases are health care workers.

Ebola cases continue to increase. Last known count was 10,000 cases. Nigeria has been declared Ebola free. Mali announced its first case. This was a young child who was ill and traveled from Guinea with her grandmother on a bus to Mali. No known secondary infections have been reported. The CLC was reminded that Ebola is not spread through the air. To be spread, the virus requires contact with the bodily fluids of an infected individual. In addition, the original case was thought to have jumped from fruit bat to human as a result of eating bat meat. These fruit bats do not bite people. They are used as food in the villages and towns. Some are killed, but some are found dead on the ground and used for food.

Partners in Health is setting up health care facilities in Sierra Leone. They are doing research to understand Ebola antibodies and using the plasma of survivors to transfer antibodies into infected individuals. The US Army has been sent to Africa to set up clinics. To date, there are two vaccines going through clinical trials.

Dr. Corley reported that six inspectors arrived today from the CDC to do due diligence on the BSL-4 lab space. They will be here up to one week and will inspect the facility and talk with personnel. It is anticipated that their report on the NEIDL will be issued at the beginning of 2015. The report will make suggestions and identify issues that need corrective action. Another CDC visit will be scheduled for 2015.

## REGULATORY

Mr. Tuohey reported that Mr. Morales is the NEIDL Responsible Officer working with the CDC. The NEIDL is waiting for the BSL-3 Select Agent permit. The NEIDL BSL-4 permitting documents that have been submitted to the BPHC have been shared with the CDC during their visit here. The next BBC meeting is November 5th and six plans are scheduled to be reviewed. Another meeting is scheduled for December 1st.

There is a tabletop emergency response drill scheduled for November 6th. The CLC is invited to attend. The scenario will be a failure of the EDS decontamination system cook tanks. BU will simulate this situation jointly with city agencies to plan appropriate response measures.

Mr. Tuohey announced that the Biosafety & Biosecurity Grand Rounds has been initiated. It will allow NEIDL personnel to examine areas where we review incidents or near misses, learn from them and create best practices for dealing with safety incidents at the NEIDL. It was noted that incidents are reported on the NEIDL and ROHP websites on a quarterly basis. Also, IBC minutes are posted on the website on a monthly basis.

Mr. Tuohey mentioned that Dr. Bhadelia was asked to speak at the Local Emergency Planning Committee (LEPC) coordinated by the Boston Fire Department. Her presentation was well received.

When asked whether BMC, could treat people exposed to Ebola, the reply was that BMC has a long history of treating people with communicable and infectious diseases. BMC is equipped to treat researchers for post exposure incidents.

The meeting was adjourned

**Next Meeting: November 25, 2014**