

**Institutional Biosafety Committee  
Minutes  
June 14, 2017  
Centerpoint Building Conference Room 312.05 9:00 am**

**Members Present**

Alan Jensen  
David Gillum  
Donna Percy  
Michael Caplan\*  
Mitch Magee  
Valerie Stout^  
\*Acting Chair  
^via video conference

**Supporting Participants Present**

Chantelle Miller  
Kirk Ryden

**Institutional Official**

Debra Murphy

**Visitors Present**

Julian Chen  
Stacey Kuznetsov\*  
Xiaodong Qi\*  
\*via conference call

**Call to Order:** The meeting was called to order by the Chair at 9:08 am and a quorum was confirmed.

**Minutes**

The May 11, 2017 meeting minutes were reviewed. A motion was made by Valerie Stout and seconded by Donna Percy to approve the minutes as presented.

Total Vote: 5                      Approved: 5                      Opposed: 0                      Abstained: 0                      Recused: 0

**Conflicts of Interest:** The Chair called for conflicts. There were none reported.

**Disclosures for Committee Review:**

Stacey Kuznetsov joined the meeting via conference call at 9:10 am.

Al Jensen joined the meeting at 9:15 am.

**Kuznetsov IBC-17-746 (BSL1 New)**

**Supporting Public Participation in Science**

**Primary Reviewer: Valerie Stout**

Stacey Kuznetsov provided an overview of the disclosure and responded to questions posed by the members. The disclosure covers numerous projects that are performed in conjunction with the public as do-it-yourself biology experiments. One experiment included the collection of soil and water from Tempe Town Lake in Winogradsky columns, self-contained columns which will grow numerous microorganisms through a provided source of nutrients. The committee required that the Winogradsky columns be handled at Biosafety Level 2 precautions and personal protective equipment. The investigator decided to not perform the Winogradsky column experiments and remove them from the disclosure. The committee discussed emergency spill and biohazardous waste handling procedures and requested written submission of those procedures. Discussion confirmed that Biosafety Level 1 precautions and personal protective equipment is appropriate, as proposed. Based on committee discussion with the investigator, the NIH Guidelines classification for this disclosure was determined to be sections III-E. The r/sNA form was updated to reflect the change. A motion was made by Mitch Magee and seconded by Donna Percy to appoint Valerie Stout as Designated Reviewer to confirm receipt of the emergency spill and biohazardous waste handling procedures.

Total Vote: 6                      Approved: 6                      Opposed: 0                      Abstained: 0                      Recused: 0

The conference call ended at 9:21 am.

**Chen IBC-17-754 (BSL2 Renewal)**

**Molecular Mechanism of Telomerase Action**

**Primary Reviewer: Mitch Magee**

Julian Chen provided an overview of the disclosure and responded to questions posed by the members. The disclosure covers a research program to understand the detailed mechanism of telomerase action and identify elements and factors important for regulating telomerase function. Telomerase holoenzyme will be reconstituted in human cells through transient transfection using two plasmids. Cell lysate containing the reconstituted telomerase will be assayed for telomerase activity *in vitro*. The committee required that steps which produce aerosols, such as vortexing and pipetting, be performed in a biosafety cabinet (BSC) prior to transport to the main lab space. Discussion confirmed that Biosafety Level 2 precautions and personal protective equipment is appropriate, as proposed. After discussion, the following changes were made:

1. Section II. F. Materials – add E. coli BL21
2. Section V. F. Safety Information – add 10% bleach to accidental spill and exposure procedures
3. Section VI. A. Recombinant or Synthetic Nucleic Acids – add E. coli to the “receiving genes” column of the table

Based on committee discussion with the investigator, the NIH Guidelines classification for this disclosure was determined to be sections III-E, III-F-1, and III-F-8 Appendices C-I and C-II. The r/sNA form was updated to reflect the change. A motion was made by Mitch Magee and seconded by Alan Jensen to approve the modified disclosure pending successful completion of a biosafety inspection.

Total Vote: 6                  Approved: 6                  Opposed: 0                  Abstained: 0                  Recused: 0

Xiaodong Qi joined the meeting via conference call at 9:42 am.

**Yan IBC-17-742 (BSL1 Modification)**

**DNA Origami Platform**

**Primary Reviewer: Hugh Mason**

Xiaodong Qi provided an overview of the modification and responded to questions posed by the members. The modification requests to upgrade the current disclosure to Biosafety Level 2 in order to add human frozen tissue samples and human cell line work. The committee confirmed that investigator will not be using recombinant DNA but will be creating synthetic DNA aptamers. The committee informed the investigator that Hepatitis B vaccination is provided by Occupational Health and an email will be sent to all personnel to sign a vaccination consent/declination form. Discussion confirmed that Biosafety Level 2 precautions and personal protective equipment is appropriate, as proposed. After discussion, the following changes were made:

1. Added Hepatitis B vaccination consent/declination form information that will be offered to all personnel

A motion was made by David Gillum and seconded by Mitch Magee to approve the modification form as modified.

Total Vote: 6                  Approved: 6                  Opposed: 0                  Abstained: 0                  Recused: 0

The conference call ended at 9:45 am.

### **Consent Agenda**

The committee reviewed and acknowledged the consent agenda.

### **Biosafety Officer's Report**

David Gillum informed the committee of the following:

- A third party reviewer from the University of Texas Medical Branch (UTMB) provided consultation and risk reduction strategies for needlesticks. The committee discussed two items from the consultation:
  - Increased education and outreach is needed on the proper use, maintenance, and cleaning of BSCs.
  - Education is needed regarding wearing long nails while performing needle injections. The committee will vote next month on a statement covering recommendations for personnel.
- Researchers working with arthropods were asked to submit Standard Operating Procedures (SOPs) for their projects for review by the biosafety team. Biosafety officers from other universities have been contacted to assist in the development of an ASU SOPs to cover future recombinant/gene drive work involving arthropods.

### **Education Item**

The committee reviewed and discussed the following education items:

- Lab at Fort Detrick Faces Closing Under Proposed Federal Budget
- New Stuff on Safety, Security, and Environmental Implications of Gene Editing Tools and Applications

The meeting was adjourned at 10:26 am. The next meeting will be held on July 13, 2017 at 1:30 pm.