

MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

January 21, 2015

3:00 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: Jun Lin, Chair; Patti Coan, Vice Chair; Seung Baek, David Bemis, Paul Dalhaimer, Elizabeth Fozo, Doris D'Souza, Tamara Chavez-Lindell, Al Iannacone, Reggie Millwood, Deidra Mountain, Bonnie Ownley, Jae Park

Ex-Officio –Brian Ranger, Jonathan Phipps, Mark Smith

MEMBERS ABSENT: Melissa Kennedy, Ling Zhao

OTHERS PRESENT: Jessica Woofter

Opening:

The meeting was called to order by the Chair, Jun Lin at 2:59 PM.

Minutes of December 17, 2014 were reviewed and approved pending correction of typographical errors. There was one abstention.

IBC Applications:

#261-15 (Cynthia Peterson) Recombinant DNA & Human Derived Materials, III-E, 3-year rewrite

Dr. Peterson's registration covers the generation of recombinant forms of several human proteins involved in cell attachment (e.g. integrins, vitronectin). Briefly, genes encoding these proteins will be mutated and subsequently transfected/expressed in *E. coli* BL-21 cells as well as eukaryotic cells so that protein structure and function can be characterized. The committee tabled this registration pending the clarification of the vitronectin source and use; clarification of recombinant hosts (just *E. coli* or human cells also?); correction of typographical errors; correction of student's last name; and the addition of an onsite supervisory investigator to act on behalf of Dr. Peterson (relocated to LSU).

#269-15 (Steven Ripp) Recombinant DNA & Infectious Agents, III-D-1-a, 3-year rewrite

Dr. Ripp's registration covers the development and testing of a rapid, fully autonomous phage-mediated bioluminescent diagnostic for bacterial pathogens. Specifically, the *luxI* gene will be inserted into bacteriophage specific for *E. coli* O157:H7, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, or *Salmonella enterica*. The respective host will be transduced with recombinant phage, and the phage/host will then be subjected to various bioreporter assays. The committee voted to approve the registration pending the correction of minor typographical errors. Containment was set at BSL-2 for work with human pathogens.

#274-15 (Steven Ripp) Recombinant DNA & Human Derived Materials, III-D-4-b, 3-year rewrite

Dr. Ripp's registration covers the development of bioluminescent bioreporter mammalian cell lines responsive to estrogens and androgens. The bioreporter will be derived from codon-optimized *lux*-containing cassettes. Transformed cell lines will then be used for xenografting (mouse model) so that tumor formation and treatments can be visualized *in vivo* (bioreporter expression induced by exposure to estrogens and androgens). The committee voted to approve the registration pending the correction of minor typographical errors. Containment was set at BSL-1 for standard molecular techniques and BSL-2 for work with human cell lines.

#372-15 (James Blackford) Recombinant DNA, III-D-4-b, 3-year rewrite

Dr. Blackford's registration covers the study of clinical trials in client-owned horses with melanoma using a DNA vaccine. The purpose of the study is to document, monitor and quantify an antigen-specific immune response in tumor bearing horses following vaccination with a plasmid DNA vector encoding the antigen of interest using target specific immune-assays developed in a previous study by Dr. Blackford's research group. The committee voted to approve the registration pending the correction of typographical errors and resolution of needleless system and volume/concentration clarification.

Old Business:

Administrative Report

Brian Ranger provided the committee with the administrative report. There were two administrative approvals. First, Dr. Steve Wilhelm's registration (#404) was updated administratively to include the addition of *E. coli* (K-12 derivative) as a heterologous host for cyanobacterial genes. Also, Dr. Jaana Mannik's human derived materials registration (#427), which covers the use of primary human tissue (placenta and umbilical cord blood) for isolation of lipids/lipid droplets for various characterization assays, was administratively approved by the Biosafety Office. For the latter, all primary tissues are derived from volunteers who have been tested and confirmed to be negative for bloodborne pathogens. Dr. Steven Wilhelm's registration (#255-11) is no longer active and any ongoing non-exempt rDNA procedures/hosts are included in his IBC approved registration (#404). Dr. Jun Lin's registration (#266-12) is no longer active and all infectious agents/materials have been included in his IBC approved registration (#265-14). Dr. Amy LeBlanc's registration (#371) is no longer active and recombinant vesicular stomatitis virus (Indiana-1) constructs are included in the IBC approved registration (#370-14) for Dr. Sara Allstadt.

BSL-3 Updates & Procedures

Brian provided the committee with an update on the progress of the BSL-3 laboratory retrofitting. The laboratory space is still under construction and is tentatively scheduled to be finished by the end of April, 2015.

Interim Non-Affiliated Member

Tamara Chavez-Lindell will be providing lecture services to the UT CVM this spring. Therefore, an interim non-affiliated representative will need to be found to fill in for Tamara during that time (though Tamara can remain on the committee as a voting member). Two individuals from local public health agencies have been suggested, and Brian will be in contact with both about the position on the committee.

New Business:

Children in Laboratories

Brian informed the committee that there was a complaint made about an infant being present in a laboratory work environment. There is currently no policy for children in the workplace for the UTK and UTIA campuses. The committee suggested drafting a standalone policy specifically addressing minors under the age of 16 in Biosafety Level 2 (and higher) research laboratory settings. Mark Smith suggested amending the "Minors in the Laboratories and Shops" so that this topic is included.

E-cigarettes in Laboratory Settings

Brian informed the committee that there is a system-wide non-smoking policy which includes electronic, tobacco-less, or vapor cigarettes. Brian sent a reminder out to individuals within laboratories via the Biosafety Listserv as a reminder. This information will also be included in future Biosafety trainings.

Laboratory/Workplace Safety Committee-Information & Updates

Brian notified the committee that a Laboratory/Workplace Safety Committee has been established for the main campus at the request of Dr. Taylor Eighmy. The committee is to address laboratory and shop safety concerns. Dr. Terry Hazen and Dr. Bill Dunn are the Chair and Vice-Chair respectively.

The meeting was adjourned at 4:22 PM. The next meeting has tentatively been scheduled for February 18, 2015 at 3 PM.