

MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

April 16, 2014

3:00 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: Chunlei Su, Chair; Jun Lin, Vice Chair; Seung Baek, David Bemis, Tamara Chavez-Lindell, Patti Coan, Paul Dalhaimer, Doris D'Souza, Al Iannacone, Melissa Kennedy, Dan Kestler, Reggie Millwood, Jae Park, Ling Zhao

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

MEMBERS ABSENT: Bonnie Ownley

OTHERS PRESENT: Jay Price, Todd Reynolds, Jessica Woofter

Opening:

The meeting was called to order by the Chair, Chunlei Su at 3:00 PM.

Minutes of March 12, 2014 were reviewed and approved pending correction of minor typographical errors.

IBC Applications:

#177-14 (Andres Nebenfuhr) Recombinant DNA Registration, III-E-2-a, 3-year rewrite

The research covered under Dr. Nebenfuhr's registration is aimed at the functional characterization of myosin motor proteins in plants. His studies involve the cloning and manipulation of myosin coding sequences from *Arabidopsis thaliana* using standard molecular biology protocols. In addition, fluorescent markers that are based on green-fluorescent protein and its derivatives will be employed for various subcellular organelles. Many of the recombinant genes will be transformed into plants (transiently or permanently) to test for their effect on plant cell behavior and/or localization of the encoded protein. The committee approved the registration pending clarification of lab coat laundering procedures, the preparation of bleach, and the correction of minor typos. Containment was set at BSL-1.

#245-14 (Todd Reynolds) Recombinant DNA, Infectious Agent & Human Derived Materials Registration, III-D-4-b & III-E, 3-year rewrite

Dr. Reynolds was present to discuss his research on identifying genes that affect biofilm formation in *Saccharomyces cerevisiae*. In particular, he is trying to elucidate genes that are involved in vacuolar protein trafficking, cell wall biosynthesis, and phospholipid biosynthesis. Once genes required for biofilm formation in *S. cerevisiae* have been elucidated, homologous genes in the pathogenic yeasts *Candida glabrata* and *Candida albicans* are studied. Recombinant biofilm gene knockouts for both *Candida* species are then tested for virulence in a mouse model. An Animal Hazard Control Form (AHCF) is in place and posted to information personnel of proper handling. The containment level was established at BSL-1 for rDNA work and ABSL-2 for animal challenges. The committee voted to approve the registration pending the clarification of animal carcass disposal, training updates, and clarification of the cancer cell line used for *in vitro* assays.

Old Business:

Administrative Report

Brian Ranger provided the committee with the administrative report. Following up on the March 12, 2014 IBC meeting, Dr. M. Reza Hajimorad's registration (#207-14) was administratively corrected to include the addition of B001 (Phytotron) to his list of study locations. Dr. Chunlei Su's registration (#232-14) was corrected to include a clarification on the methods of *T. gondii* inoculations and relative risks of exposure. Dr. Shawn Campagna's registration (#323-14) was corrected to include a clarification of his projects aims and scope in his registration. Dr. Irene Hanning-Jarquin's registration (#361-14) was corrected to include secondary lab contacts and phone numbers in case of emergencies. Dr. Qixin Zhong's registration (#416) was corrected administratively to include Dr. Faith Critzer's most recent training dates. Dr. Marc Caldwell's registration (#418) was corrected administratively to indicate sharps used for post-inoculation blood draws. Dr. Steve Ripp amended his registration (#274-12) to include the addition of a third generation (4-plasmid) lentiviral vector system (Addgene) for delivery of *luxCDABE* to human cell lines (*in vitro* studies). Dr. Karen Vail's registration (#267-12) covering housing and containment of brown recluse spiders has been terminated (no plans to resume the project). Dr. Alex Osmand's & Dr. Dan Kestler's registration (#358) has been terminated (inactive) and recombinant materials are to remain in secure storage.

BSL-3 Lab Update

Dr. Nobles and Brian met with Dr. Mike McEntee and Hospital Operations at the College of Veterinary Medicine (CVM) about converting room A333 into a BSL-3 laboratory for Dr. Colleen Johnson's hantavirus research. The project is currently on hold pending Dr. Johnson's acceptance of her director/faculty appointments. The committee had concerns regarding the proximity of the CVM's Munchbox cafeteria to the proposed BSL-3 lab location. The committee also had concerns about packaging and transport of diagnostic samples and laboratory biohazardous waste. It was suggested that Dr. Johnson purchase a benchtop autoclave for her research lab.

Biohazards in Teaching Labs

Brian sent out a short survey to collect information regarding materials used within teaching laboratories on campus. He suggested to the committee that registrations for biological teaching materials would be handled through the office administratively, and special cases would be brought before the committee for review. He also suggested that the teaching laboratories would be inspected with the same frequency as BSL-1 (annually) or BSL-2 (semi-annually) research labs, depending on the relative risks of the biological hazards used in teaching exercises. The committee recommended that Brian draft a course checklist to attach to the course approval process prior to departments offering courses that might involve biological hazards.

Lab Coat Laundering

Brian and Susan Fiscor (UTIA Safety Office) have confirmed that Central Sterilization at the College of Veterinary Medicine will launder reusable lab coats from external departments for \$0.10/coat with the stipulation that lab coats are packaged and labeled appropriately. Each department must pick up and drop off their lab coats to Central Sterilization. Brian suggested to the committee that a SOP should be drafted to cover proper packaging and other safety-related procedures if lab coats are submitted from labs working with hazardous agents. Several SOPs and policies from other institutions were presented as examples. The committee recommended preparing a visual flow chart to guide the research community on the expected procedures.

Biosafety Program Survey

Brian presented the committee with the preliminary Biosafety survey results. The results suggested that committee members and the expertise they bring to the committee are not advertised very well. Jon Phipps suggested that committee members provide just a brief summary about individual members and their areas of expertise. Brian notified the committee that these details would likely be published on the Biosafety website and through the Biosafety and Office of Research & Engagement Listservs (likely after the committee membership changes in July). The committee generally agreed with these recommendations. The survey will be closed at the end of the day on 4/18/14, and the final results will be compiled into a written report.

Membership Status/Review

Dr. Chunlei Su will be stepping off the committee, and the Microbiology Department will be replacing him with Dr. Liz Fozo. Dr. Jun Lin will be taking over the Chair position in the new fiscal year. Dr. Dan Kestler will be stepping off the committee, and Dr. Deidre Mountain will be replacing him as the Graduate School of Medicine representative. Dr. Robert Nobles informed the committee that he would like to formally recognize the committees' contributions to the university through an annual banquet, assessments of committee functions and activities, and annual seminars for faculty to be delivered by the Chair or other committee members. He also noted that faculty appointments to the committee will be moving to 3 year terms with the possibility of renewal.

New Business:

Lab Animal Facility Waste/Bedding for UT Facilities Composting

Jay Price from Facilities Services was present to discuss the feasibility of using animal bedding and waste from dedicated laboratory animal facilities (LAFs; Walters Life Sciences LAF, Jessie Harris LAF, & College of Veterinary Medicine LAF) for compost. The committee carefully considered the proposal, but ultimately recommended that this practice should be discouraged due to the multiple hazards possibly contained in the bedding/waste, the difficulty of creating multiple waste streams within the respective LAFs, the occupational health risk associated with animal allergens, and the possibility of public relations backlash resulting from the use of biomedical research animal bedding/waste in compost applied at various UT locations.

Draft Biosafety Policy

Brian notified the committee that he posted the draft Biosafety Policy on the use of biohazards in research and teaching facilities. Brian asked the committee to email him comments and suggestions. The changes will be implemented in the new fiscal year.

The meeting was adjourned at 4:45 PM.

The next meeting has tentatively been scheduled for 6/18/14 at 3 PM.