

# MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

April 15, 2015

3:00 PM, 410 Plant Biotechnology Building

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

Ex-Officio –Brian Ranger, Jonathan Phipps

MEMBERS ABSENT: Paul Dalhaimer, Brittany Isabell, Deidra Mountain

OTHERS PRESENT: Dr. Neal Stewart, Jessica Woofter

## Opening:

The meeting was called to order by the Chair, Jun Lin at 3:01 PM.

Minutes of February 25, 2015 were reviewed and approved as written with one abstention.

## IBC Applications:

### **#286-15 (Rebecca Prosser) Acute Biological Toxin, 3-year rewrite**

Dr. Prosser's registration covers the use of minute quantities of tetrodotoxin (TTX) as a reagent for neurobiological assays on murine brain tissues. Brian Ranger indicated that only small amounts (<1 mg) of TTX are kept on hand and that inventories are up-to-date and appropriately secured. The committee voted to approve the registration pending correction of typographical errors; clarification of LD50/species information; concentrations used; and identification of secondary personnel to be present during usage and application of TTX.

### **#376-15 (Neal Stewart) Recombinant DNA, III-E-2-a, 3-year rewrite**

Dr. Neal Stewart was present to provide the committee with a summary of his research covering the enhancement of biofuel productivity through the generation of transgenic plants. Investigations will focus on cell wall biosynthesis/modification genes and genes involved in terpenoid production. Standard *Agrobacterium*-based transformations will be used. Modified plants include switchgrass, rice, *Arabidopsis thaliana*, and tobacco. Most experiments are conducted in small-scale, lab-contained tissue culture. Some transgenic plants, primarily switchgrass, are evaluated under field conditions for growth and agronomic performance to determine their potential as a biofuel feedstock. All field release studies are conducted under the authority of USDA APHIS BRS. The committee voted to approve the registration pending clarification of plant species and the inclusion of Reggie Millwood on the personnel list. There was one abstention. Containment was set at BSL-1/BL-1-P.

### **#379-15 (Neal Stewart) Recombinant DNA, III-E-2-a, 3-year rewrite**

Dr. Neal Stewart was present to provide the committee with a summary of his research on developing transgenic plants (e.g. *Arabidopsis thaliana*, tobacco, and soybean) as phytosensors that can detect early pathogen attack and herbicide contaminants in agricultural lands. Bioreporter constructs include condition/challenge-sensitive promoters fused to red fluorescent protein (RFP) and red colored *papI* reporter genes. Standard *Agrobacterium*-based transformations will be used. Challenge pathogens

include *Pseudomonas syringae* and *Pseudomonas marginalis*. Soybean cyst nematode (*Heterodera glycines*) will be used as a challenge pest for transgenic soybean constructs. The committee voted to approve the registration pending administrative correction of typographical errors and the inclusion of Reggie Millwood in the personnel list. There was one abstention. Containment was set at BSL-1/BL-1-P.

## **Old Business:**

### Administrative Report

Brian Ranger provided the committee with the administrative report. Following up on the February 25, 2015 IBC meeting, Dr. Cynthia Peterson's registration (#261-15) was corrected administratively to include the addition of *E. coli* as a cell line and minor typographical errors. Dr. Tessa Burch-Smith's registration (#375-15) was corrected administratively to clarify the addition of two genes, *ipi1* and *rpl15*. The registration was also corrected for minor typographical errors and to include a spill response. Dr. Colleen Jonsson's registration (#428) was administratively corrected to include an assurance that all bench procedures will be conducted under Dr. Jonsson's direct supervision. Dr. Guoxun Chen's registration (#344-12) was reviewed and approved administratively by the IBC Chair to include the use of recombinant adenoviruses (AdV). Dr. Vermont Dia's registration (#429) was approved administratively by the Biosafety Office for the use of human derived materials. Dr. Sara Allstadt's registration (#370) is no longer active and recombinant vesicular stomatitis virus (Indiana-1) constructs will remain in USDA APHIS-approved secured storage in the short-term. Dr. Neal Stewart's registrations (#373 & #374) are no longer active and recombinant/transgenic constructs are to remain in secure storage.

### BSL-3 Updates

Brian Ranger gave the committee an update on the progress of the Biosafety Level 3 lab being built in the College of Veterinary Medicine. The casework is expected to be delivered by May 5<sup>th</sup>, but the facility will likely not be verified by a third party before mid-May.

### iMedRIS Updates

Jessica Woofter notified the committee that she has been in contact with Patricia Page and there are currently no updates on the iMedRIS Biosafety module.

### Teaching Lab Program Updates

Brian Ranger gave the committee an update on the Teaching Lab Program. The revised framework has been sent out to the task force. It outlines information and procedures for apprising individuals about basic safety protocols in place.

### Non-Affiliated Member

Brittany Isabell has been trained and formally appointed to the IBC and will be joining us for the May 20<sup>th</sup> IBC meeting.

### CVM-AVMA Accreditation

Representatives of the American Veterinary Medical Association (AVMA) Council on Education recently visited the College of Veterinary Medicine to conduct an on-site review of the College in relation to the eleven Standards of Accreditation. The site visit occurred during the week of March 1-5, 2015. There were no major hurdles or problems noted during the visit.

## **New Business:**

### BSL-3 Verification/Inspection Checklist

Brian Ranger notified the committee that estimates for the annual certification of the BSL-3 lab have been received. The initial bids range from \$6-11k for HVAC testing and facility review. After reaching out to the UT Health Science Center (Memphis, TN), it was determined that their in-house facility operators could do the testing and validation at very low cost (travel reimbursement and low-cost supplies). Brian also presented the committee with a SOP/verification checklist for their review. There were no concerns regarding the SOP/verification checklist.

### 2014 Annual Report

Brian Ranger presented the committee with the 2014 Annual IBC/Biosafety Report. There were no major concerns or questions.

### Spring 2015 Inspections

Dr. Jonathan Phipps is working on spring inspections currently and has not noted any major problems or issues.

### External Audit of Biosafety Program

Brian Ranger informed the committee that he is working with Dr. Nobles to identify an external auditor for third-party evaluation of the UT Biosafety Program. NIH recommends an external audit, but it is not required.

### USDA APHIS Inspection-EPP Diagnostic Lab

Brian Ranger notified the committee that there was a recent USDA APHIS inspection for Dr. Mark Windham and Dr. Denita Hadziabdic-Guerry's lab. Their lab is registered for the use of *Geosmithia morbida*. Dennis Haffner with USDA inspected the lab. No major concerns were cited.

### Student Group Engagement-Remote Area Medicine

Dr. Jonathan Phipps mentioned to the committee there has been a recent interest in biosafety training from individuals volunteering for the Remote Area Medical (RAM) service. Many of the individuals are students in pre-professional and allied health programs.

### IBC/Compliance Committee Reception (April 27<sup>th</sup>)

Brian Ranger announced to the committee that Dr. Nobles has arranged a Compliance Appreciation Celebration scheduled for April 27<sup>th</sup> from 4:30 – 6:00 PM. The reception is designed to thank all faculty and staff serving on various compliance committees.

The meeting was adjourned at 4:21 PM.

The next meeting has tentatively been scheduled for May 20, 2015 at 3 PM.