MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING
May 15, 2013
3:00 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT:	Chunlei Su, Chair; Jun Lin, Vice-Chair; Seung Baek, David Bemis, Patti Coan, Tamara Chavez-Lindell, Doris D'Souza, Ling Zhao Ex-Officio –Brian Ranger, Jonathan Phipps
MEMBERS ABSENT:	Paul Dalhaimer, Al Iannacone, Melissa Kennedy, Dan Kestler, Reggie Millwood, Bonnie Ownley, Jae Park
OTHERS PRESENT:	Dr. Faith Critzer, Dr. Tarek Hewezi, Dr. Rebecca Wilkes, Jessica Woofter

Opening:

The meeting was called to order by Chair, Chunlei Su at 3:05 PM.

Minutes of April 17, 2013 were reviewed and approved as written with one abstention.

IBC Applications:

#299-13 (David Golden) Infectious Agents Registration, 3-year rewrite
Dr. Golden's registration covers his research involving foodborne pathogens to: determine the efficacy of food spoilage prevention strategies; evaluate the molecular basis of resistance to antimicrobial treatments; improve methods of detection; and investigate the effects of stress and microbial ecology on the growth and survival of foodborne microorganisms. Organisms include *Listeria monocytogenes*, *Salmonella enterica*, *E. coli* (toxigenic strains including O157:H7), and *Shigella spp.* The biosafety level was established at BSL-2. The committee approved the registration pending administrative correction of minor typos and training dates.

#398 (Tarek Hewezi) Recombinant DNA Registration, III-E-2-a, New Registration
Dr. Hewezi gave an overview of his registration covering plant-parasitic nematodes that negatively impact plant growth development. His study will include transgenic Arabidopsis and soybean to study the genetic control of plant responses to biotic and abiotic stresses. Constructs include nematode effector genes as well as modified genes of the host (e.g. overexpression constructs of native Arabidopsis genes). Traditional plant transformation techniques (e.g. Agrobacterium-mediated gene transfer) will be used to generate the transgenic plants. Containment was set at BSL-1/BL-1-P. The committee approved the registration as written pending administrative correction of typos.

#399 (Faith Critzer) Infectious Agents Registration, New Registration
Dr. Critzer summarized her registration covering novel antimicrobial coating systems used to improve the safety and quality of cantaloupes and other produce. She proposes to use plant-based food antimicrobials, essential oils, to develop systems that can overcome barriers to diffuse to cavities on cantaloupe surfaces and continuously release antimicrobials therein. The registration also covered novel washing techniques to reduce pathogen burden on harvested fruits and vegetables (e.g. lettuce, carrots, and cantaloupe). Traditional plating techniques such as spread plating, pour plating, and spiral plating will be utilized for enumeration of foodborne pathogens. In addition, molecular techniques such as PCR and Reverse-Transcriptase PCR (RT-PCR) may be utilized for quantifying pathogens or

detecting genetic markers. Challenge organisms will include *Salmonella enterica, Listeria monocytogenes,* and *E. coli* (toxigenic strains including O157:H7). The committee approved the registration as written pending correction of typos and clarification of pathogen application technique (spraying vs. immersing), secondary containment measures during incubation, and spill response. The biosafety level was set at BSL-2.

#400 (Rebecca Wilkes) Recombinant DNA and Human Derived Materials Registration, III-D-3/4-b, New Registration

Dr. Wilkes discussed this registration covering the adaptation of hematopoitic stem cell function to combat feline infectious peritonitis (caused by feline coronavirus) using small interfering RNA molecules. In this protocol, Dr. Wilkes will transfect monocyte precursor cells using shRNA bearing lentiviral vectors (replication incompetent) *ex vivo* before autogenic re-transplantation to donor animals. This phase of the project will use a control vector, which expresses green fluorescent protein as a means to track infectivity. The committee approved the registration as written. Containment was set at BSL-2 (*ex vivo* transfections) and ABSL-1. There were concerns regarding the proposed adoption of the research animals on this project (per IACUC protocol-approval pending). However, the committee deferred to the discretion of the IACUC and its established adoption policy.

#401 (Rebecca Wilkes) Recombinant DNA Registration, III-D-4-a, New Registration

Dr. Wilkes' registration covers her research using a baculovirus vector to deliver a gene expression vector encoding green fluorescent protein to the cornea of cats infected with feline herpes virus-1. The IBC approved the registration as written. Containment was set at BSL-1/ABSL-1. As with protocol #400 the IBC deferred adoption considerations to IACUC policies.

Old Business:

Administrative Report

Brian Ranger provided the committee with the administrative report. Following up on the April 17, 2013 IBC meeting, Dr. David Brian's registration (#303-13) was corrected administratively for minor typos and clarification of the spill response plan. Dr. Robert Craft's registration (#402; human derived materials) was approved administratively. Dr. David Brian's registration (#304-10) was terminated.

IBC Charter Rewrite

Brian Ranger informed the committee that the subcommittee for charter review will be meeting on May 21, 2013. The committee is to send comments or suggestions regarding charter changes to Brian.

IBC Member/Appointments

Brian Ranger notified the committee that the reappointment of committee membership cycles every 2 years, and asked current committee members to notify the Biosafety Office if they plan to discontinue membership.

Proposal for Membership Roles/Responsibilities

Brian Ranger proposed to the committee to consider Designated Member Reviews of every registration that is processed and to suggest that IBC members participate in site inspections in conjunction with the Biosafety Office (1x/year).

New Business:

Spring BSL-2 Inspections

Brian Ranger notified the committee that the Spring Biosafety Level 2 inspections of labs are currently underway.

May 13, 2013 UTIA/BRS Workshop Summary

Brian Ranger summarized the UTIA/BRS Workshop held on May 13, 2013. The workshop provided an in-depth review of the regulations covering transgenic crop development and field releases (7 CFR Part 340).

Lab Coat Laundering Update

Brian Ranger notified the committee the lab coat laundering issue was an agenda item at the April 3, 2013 UTK Safety Committee. There was no change in the current guidance; i.e. without a dedicated laundry facility or a campus-wide contract, lab coat laundering will remain at the discretion of each department.

The next meeting has been tentatively scheduled for July 17, 2013.

The meeting was adjourned at 4:18 PM.