

MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

February 15, 2012

3 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: John Sanseverino, Chair; Chunlei Su, Vice-Chair; Tamara Chavez-Lindell, Paul Dalhaimer, Al Iannacone, Dan Kestler, Jun Lin, HCR Wang

Ex-Officio – Brian Ranger, Sarah DiFurio

MEMBERS ABSENT: David Bemis, Patti Coan, Doris D'Souza, Mariano Labrador, Reggie Millwood, Bonnie Ownley, Ling Zhao

OTHERS PRESENT: Dr. Dan Close, Dr. Scott Lenaghan, Dr. Mitra Mazarei, Jessica Woofter

Opening:

The meeting was called to order by Chair, John Sanseverino at 3:06 PM.

Minutes of January 18, 2012 were reviewed and approved as written.

IBC Applications:

#269-12 (Steven Ripp) Infectious Agent Registration, 3-year rewrite

#336-12 (Steven Ripp) Recombinant DNA Registration, III-D-1-a, 3-year rewrite

Dr. Dan Close provided the committee a summary of Dr. Ripp's research in developing and testing 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 registrations as written (one abstention).

#337-12 (Mingjun Zhang) Infectious Agent Registration, 3-year rewrite

Dr. Scott Lenaghan provided the committee a summary of research objectives and answered committee questions. This study uses *Giardia lamblia*, a gastrointestinal pathogen of humans and mammals, and *Tritrichomonas foetus*, an organism sexually transmitted in cattle and to a lesser degree in cats. These organisms will be used to model and measure attachment forces on substrates including human cells. No genetic modification of the cells will take place. Only trophozoites (vs. cysts) of *Giardia lamblia* will be grown, reducing the risk of infection since trophozoites are not environmentally stable. The committee requested the following administrative changes: 1) "Hela endothelial" should be changed to "Hela epithelial" [Pg. 1]; 2) add description that Hepatitis B vaccinations are available to personnel; 3) Dr. Zhang and his job title should be added to list of personnel [Pg. 5]; and 4) under the department title it should read "Mech. Aero. & Biomed. Eng." rather than "MABE" [Pg.1]. The committee approved the registration pending administrative corrections.

#270-12 (R.N. Trigiano) Recombinant DNA Registration, III-E-2-a, 3-year rewrite (*revisit*)

Dr. Trigiano's registration involved the creation of small insert libraries of various woody and herbaceous plants, as well as *Agrobacterium*-mediated transformation of chrysanthemum plants with selectable markers (e.g. kanamycin resistance) and/or reporter genes (e.g. GFP). Transformed plant cells are then regenerated for downstream studies. All transgenic plants will be maintained in the lab and destroyed prior to disposal. The committee previously posed questions/concerns regarding the "other plant species" listed under hosts in the January meeting. The registration was tabled for the February meeting, and Dr. Trigiano made the requested changes and clarified the gene and species strains included in the registration. The committee approved the registration as written.

#274-12 (Gary Saylor) Recombinant DNA Registration, III-D-4-b, 3-year rewrite

Dr. Dan Close provided the committee a summary of this registration covering the development of bioluminescent bioreporter mammalian cell lines responsive to estrogens and androgens. The bioreporter will be derived from codon-optimized *lux*-containing cassettes. The committee requested that Dr. Saylor be listed on the registration personnel and receive appropriate training. It was also suggested that Dr. Steven Ripp may act as the PI if listed as such on the applicable grant. The committee voted to approve the registration pending PI/training resolution. There was one abstention.

#376 (Neal Stewart) Recombinant DNA Registration, III-E-2-a, new registration

Dr. Mitra Mazarei provided the committee a summary of this registration 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. Transgenic plants are evaluated under field conditions for growth and agronomic performance to determine their potential as a biofuel feedstock. The committee approved the registration as written.

Old Business:

Administrative Report

Brian Ranger provided the committee with the administrative report. Following up on the January 2012 IBC meeting, Dr. Lin's registrations (#265-12 & #266-12) were administratively corrected to include consistent bleach solutions and typos. Dr. Small's registration (#271-12) was corrected to include Dr. Williamson and Occupational Health as spill/emergency response contacts. Two registrations were administratively terminated (PI no longer at UT).

Biowaste Disposal Process-Full Implementation

Brian Ranger provided the committee with an update on the autoclave biowaste disposal process. The Biosafety Office and Facilities Services (Building Services) have placed color-coded, labeled containers in designated areas. The new process was implemented February 1, 2012.

IBC Website Reconstruction

Dr. Sanseverino, Brian Ranger, and Jessica Woofter met briefly with Bob Hillhouse from OIT to discuss the migration of the current IBC website from an ORACLE platform to SharePoint. The migration will not be implemented until late April (or later).

Data Management System Update / Form Revisions

Brian Ranger provided the committee with an update on the data management demos that the Biosafety department attended. Brian Ranger recommended BioRAFT to Dr. Reed as a system that

would greatly benefit data management for the Biosafety department and principal investigators. The form revision committee will be reconvened in late March or early April.

New Business:

Minors in Laboratories

Brian Ranger provided the committee with a draft of the system policy for the STEM program. The STEM program, an educational outreach program that invites high school juniors and seniors to come and train in various science and engineering labs around campus, was recently brought to the attention of the Office of Research compliance officers. The UT-Knoxville area safety/compliance officers have expressed concerns to various administrators/committees regarding training, lab safety, and liability relative to minors working in laboratories. Mark Smith (EHS) and Judy McGhee (Risk Management) are currently working on a generic system policy to address these concerns. The committee was asked to send comments to Brian Ranger. The committee expressed concern about legal obligations/ramifications if a student is injured in the lab; the supervision clause needs additional clarification and that the PI's responsibilities should be clearly defined; students should receive a formal safety "overview" training; and each student should be closely supervised by a lab leader or PI.

2011 IBC Annual Report

Brian Ranger provided the committee with a 2011 Institutional Biosafety Committee and Biosafety Office activity summary that will be presented to the Office of Research.

2011-12 IBC/Biosafety Client Satisfaction Survey

Brian Ranger provided the committee with an update on the 2011-12 IBC/Biosafety Customer Service Survey. The survey was closed on January 21, 2012 and a report was compiled on the 89 responses received. Client feedback was generally positive. A few participants commented that the current IBC registration forms are too cumbersome to complete and/or that there are too many registration form types.

The committee elected to reconvene March 14, 2012 since the scheduled March 21st meeting falls on Spring Break.

The meeting was adjourned at 4:03 PM.