

MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

July 29, 2015

3:00 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: Jun Lin, Chair; Patti Coan, Vice Chair; Seung Baek, Paul Dalhaimer, Tamara Chavez-Lindell, Elizabeth Fozo, Brittany Isabell, Reggie Millwood, Jae Park, Ling Zhao

Ex-Officio – Brian Ranger, Mark Smith, Jessica Woofter

MEMBERS ABSENT: David Bemis, Doris D'Souza, Al Iannacone, Melissa Kennedy, Deidra Mountain

OTHERS PRESENT: Drs. Rongjian Ye and Rebecca Trout Fryxell

Opening:

The meeting was called to order by the Chair, Jun Lin at 3:00 PM. The minutes of June 17, 2015 were reviewed and approved pending correction of a typographical error.

IBC Applications:

#380-15 (Neal Stewart) Recombinant DNA, III-E-2-a, 3-year rewrite

Dr. Rongjian Ye was present to provide the committee with a summary of Dr. Stewart's research involving functional analysis of several genes belonging to the ATP-binding (ABC) superfamily, including those related to herbicide resistance or bacterial pathogens resistance. Briefly, full-length cDNA of candidate genes are being cloned into plant expression vectors, which will be used to transform susceptible biotypes of horseweed and/or Arabidopsis plants. These stably transgenic plants will be transformed using Agrobacterium-mediated transformations to deliver individual vector constructs. Similarly, RNA interference (RNAi) and genome editing (CRISPR/Cas9) constructs will be designed to generate stably transgenic horseweed and/or Arabidopsis plants in resistant biotypes. Plants will be grown in growth chambers and greenhouse (with pollen screens, pollen bags, or flower removal). If plants are to be released into the field we will obtain a USDA APHIS BRS permits/notification prior to release. The proposed containment level is BL-1/BL-1-P. The committee voted to approve the registration as written. There was one abstention.

#384-15 (Rebecca Trout Fryxell) Infectious Agents, 3-year rewrite

Dr. Rebecca Trout Fryxell was present to discuss her research covering the survey of arthropods for various bacterial (Rickettsial), viral (La Crosse), or protozoan (Plasmodium/Haemeaproteus) pathogens by collecting vectors (mosquitoes, ticks, black flies) from the field, identifying them and storing them in 80% ethanol. Molecular techniques (DNA extraction, PCR) will be used to identify the different pathogens. Additional procedures such as dissections of insect tissue (e.g. dissecting mosquito salivary glands from the head & thorax) may be conducted for species identification. Also, Dr. Trout Fryxell will be establishing breeding colonies of flies and mosquitoes. Live arthropods will be maintained/handled in accordance with ACL-1 (flies) and ACL-2 (mosquitos) guidelines. The committee voted to approve the registration pending a revision of the non-technical summary.

#385-15 (Elias Fernandez) Recombinant DNA, III-E, 3-year rewrite

Dr. Fernandez's research covers the characterization of the biophysical properties of nuclear receptors for the development of more effective therapies. Entire genes or subdomains of the genes will be sub-cloned into pET vectors and overexpressed in BL21DE3 cells. Protein will be isolated/purified by conventional means and used for biophysical assays (e.g. X-ray crystallography). The committee voted to approve the registration as written. The research will be conducted at BSL-1.

Old Business:

Administrative Report

Brian Ranger provided the committee with the administrative report. Following up on the June 17, 2015 IBC meeting: Dr. Timothy Sparer's registration (#277-15) was corrected administratively to include the modification and addition of the cell lines for breast cancer, human melanoma (A375), and Cos-7 cells; Dr. Barry Rouse's registration (#280-15) was corrected to include training updates and clarification that the recombinant DNA construct will be used for *in vivo* studies in a mouse model. Dr. Matthew Cooper's registration (#421) was corrected administratively to include the addition of replication-incompetent canine adenovirus, type 2 (CAV-2) vectors. Dr. Timothy Sparer terminated his registration (#278-12), and recombinant DNA constructs have been included in his approved IBC registration (#277-15). Dr. Barry Rouse has terminated his registration (#281-12), and recombinant DNA constructs have been included in his approved IBC registration (#280-15). Dr. Neal Stewart terminated his registration (#387), and recombinant/transgenic constructs are to remain in secure storage.

BSL-3 Progress Updates

Brian informed the committee that the Biosafety Level 3 lab is nearing completion. Final security controls and minor cosmetic issues are currently being addressed. Brian is also working with Drs. Jonsson and Kania in developing a standard operating procedure for the BSL-3 lab. Certification for the lab is tentatively scheduled for August 13th – 14th.

iMedRIS Updates

Jessica reported that she is in the process of compiling a line item request of changes for the iMedRIS IBC registration module, and will send the list on to Patricia Paige upon completion.

Policy Revisit

Brian notified the committee that the policy and teaching framework is still in progress. Brian will have a final version available for the committee by the August meeting.

Biosafety Specialist Update

Brian updated the committee on the search for the Biosafety Specialist position, previously staffed by Jonathan Phipps. The search committee met last week and made recommendations for three primary candidates. Marsha Smith with Radiation Safety is working on scheduling interviews for the week of August 10th.

Biosafety Self-Assessment

Brian notified the committee he is currently seeking individuals outside of the IBC to help with the self-assessment subcommittee. He plans to contact individuals within the compliance departments as well as principal investigators that have benefited from the use of the IBC.

New Business:

NIH Site Visit Program-Article

Brian posted an article that was written by the NIH Office of Biotechnology about site visit activities for review by the committee.

Division of Biology Training (August 18, 2015)

Brian notified the committee that the next Division of Biology Training will be held at the Alumni Building, Room 27 on August 18, 2015. The training will be all day and include talks from the various safety and compliance offices on campus.

BCMB Biosafety Colloquium (August 24, 2015)

Brian has scheduled a Biosafety Colloquium seminar with the Department of Biochemistry, Cellular and Molecular Biology for August 24, 2015. He plans to reach out to the faculty and explain requirements for the IBC.

Other

Dr. Ownley has submitted her resignation letter and recommended Dr. Reza Hajimorad (Entomology & Plant Pathology) as her replacement. Dr. Hajimorad will be attending the next meeting. The IBC intends to honor Dr. Ownley for her 13 years of service to the IBC at the next meeting.

The meeting was adjourned at 3:30 PM. The next meeting is tentatively scheduled for August 19, 2015 at 3 PM.