

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

November 2, 2016

3 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: Chair, Jun Lin; David Bemis, Tamara Chavez-Lindell, Al Iannacone, Paul Dalhaimer, Doris D'Souza, Elizabeth Fozo, Reza Hajimorad, Brittany Isabell, Reggie Millwood, Jae Park, Ling Zhao

Ex-Officio –Linda Hamilton, Scott Moser, Brian Ranger, Jessica Woofter

MEMBERS ABSENT: Patti Coan, Seung Baek, Melissa Kennedy, Deidra Mountain

OTHERS PRESENT: Dr. Wusheng Liu

Opening:

The meeting was called to order by the Chair at 3:00 PM. The minutes of September 21, 2016 were reviewed and approved as written with two abstentions.

IBC Applications:

#411-16 (Nitin Jain) Recombinant DNA Registration, III-E, 3-year Rewrite

Dr. Jain's research will involve cloning of human p450 genes, cyp2c9 and cyp3a4 into a pcWORI vector. The genes have been synthesized artificially using a commercial service. The recombinant DNA will then be used to express protein in a BL-21, XL-1 blue or DH5alpha *E. coli* expression system. The expressed proteins will be purified using standard chromatographic approaches and then used further for structure-function studies using NMR spectroscopy. The containment level was established at BSL-1. The committee voted to approve the registration pending clarification on the cloning procedure.

#455 (Wusheng Liu) Recombinant DNA Registration, III-E-2-a, New Registration

Dr. Wusheng Liu was present to discuss his research involving the development of a new approach for limiting pollen-mediated gene flow from transgenic camelina to nontransgenic camelina and its wild relatives. The project specifically involves genetic engineering (overexpression of genes involved in cleistogamy) and genome editing (CRISPR/Cas9) to make camelina flowers non-opening so that self-pollination and fertilization take place within the closed flowers and there would be no (or little) release of transgenic pollen. Standard agrobacterium-mediated transformation and floral dip methods will be used. The committee voted to approve the registration as written with one abstention. Containment was set at BSL-1/BL-1-P.

Old Business:

Administrative Report

i. Administrative Approvals

Brian Ranger provided the Committee with the administrative report. Following up on September 21, 2016, IBC meeting, Dr. Maitreyi Das' registration (#412-16) was updated to include a clarification for the nontechnical and technical summaries, addition of the PI to the personnel list, and the autoclave validation date. Dr. Dallas Donohoe's registration (#410-16) was administratively approved by the Biosafety Officer. The registration includes various human cell lines from ATCC derived from the colon, liver, or cervix (HeLa). Drs. Lee Jantz's and Dawnie Steadman's registration

(#446) was administratively approved by the Biosafety Officer. The registration covers unfixed samples from human cadavers, decompositions studies, and cleaning/processing human remains at the Forensic Anthropology Center.

ii. Administrative Terminations

There were no administrative terminations for this month.

iii. Accidents, Injuries/Exposures:

There were no accidents, injuries, or exposures for this month.

iv. Laboratory Report

Linda notified the committee that 83 audits have been completed between April to November of 2016. A report on audit findings has been compiled, was featured in the latest ORE Newsletter, and is available on the Biosafety Office website.

iMedRIS Update

Jessica notified the committee that the iMedRIS front-end user manual is completed and the draft is available for review. She will be meeting with Patricia Paige from UT Memphis on a weekly basis to work on the routing procedures for the Biosafety Office and IBC Reviewers. She is also currently developing video trainings for the IBC registration submission and review processes.

New Business:

Policy for recombinant DNA use outside of containment-review of the coordinated regulatory framework vs. IBC purview

Brian informed the committee about a recent IACUC protocol proposing to use a recombinant raccoon pox virus expressing a rabies antigen using a domestic (client-owned) cat and tiger model, with the eventual goal of adapting this system for canine distemper vaccination (particularly for tigers in the wild). Under the context of the NIH Guidelines, the IBC does not have authority to approve any recombinant DNA procedures outside of containment. Rather, all environmental releases fall under the authority of the coordinated regulatory framework (USDA, FDA, EPA, etc.) This information has been relayed to the principal investigator who has withdrawn the project until more information can be collected.

CDC inspection for Jonsson laboratories (December 13th)

Brian informed the committee that the CDC will be coming to inspect Dr. Jonsson's BSL-3 lab on December 13th. Brian will be meeting with Dr. Jonsson's group next week to make sure their procedures are in accordance with written protocols and exposure plans.

Refresher training updates (Hamilton)

Linda notified the committee that the audit findings will be incorporated into a refresher training. She is currently working on developing the training and finding the best platform to present the information.

2016-17 Exposure Control Plan updated

Brian informed the committee that the updated bloodborne pathogens exposure control plan is now available on the Biosafety website.

Updates from ABSA-safety culture, genome editing and exempt materials

Brian gave the committee a summary of topics discussed at the ABSA conference, including strengthening safety culture, the latest developments in genome editing technologies and regulatory

oversight, and best practices for NIH Guidelines-exempted materials/experiments. On the latter, simple mechanisms for documenting exempt protocols were discussed.

ORE *Integrity* Newsletter

ORE has started releasing a quarterly newsletter called *Integrity* that spotlights safety and compliance. The next issue will come out in February, 2017.

The meeting was adjourned at 4:00 PM. The committee agreed to move the next meeting from December 21, 2016 to either December 7th or 14th. A doodle poll will be emailed to decide on the date.