**MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING**
**December 17, 2014**
**3:00 PM, 410 Plant Biotechnology Building**

| | |
|---|---|
| MEMBERS PRESENT: | Patti Coan, Vice Chair; David Bemis, Elizabeth Fozo, Doris D'Souza, Tamara Chavez-Lindell, Al Iannacone, Melissa Kennedy, Bonnie Ownley, Jae Park, Ling Zhao |
| | Ex-Officio –Brian Ranger, Jonathan Phipps, Mark Smith |
| MEMBERS ABSENT: | Seung Baek, Paul Dalhaimer, Jun Lin, Reggie Millwood, Deidra Mountain |
| OTHERS PRESENT: | Richard Braswell, Scott Busby, Dr. Robert Denovo, Dan Smith, Jessica Woofter |

**Opening:**

The meeting was called to order by Patti Coan, Vice-Chair at 3:03 PM.

Minutes of October 15, 2014 were reviewed and approved as written.

**IBC Applications:**

**#265-14 (Jun Lin) Recombinant DNA, Infectious Agent, & Human Derived Materials, III-D-1-a/4-b, 3-year rewrite**
Dr. Lin's registration covers his research focusing on determining the molecular mechanism of colonization and antibiotic resistance in *Campylobacter* species (*C. jejuni, C. coli*). Specifically, transposon mutagenesis/complementation studies as well as transcriptional studies will be used to elucidate which genes/gene promotors are essential for campylobacter colonization and persistence. Additionally, wild type and recombinant strains will be studied *in vivo* in chickens. Recombinant plasmids will be either introduced to *Salmonella* vaccine strains for oral administration or introduced directly as DNA vaccines via intranasal route. Dr. Lin's studies will be conducted at BSL-2/ABSL-2. The committee approved the registration as written.

**#334-14 (Gladys Alexandre) Recombinant DNA, III-E, 3-year rewrite**
Dr. Alexandre's registration covered basic recombinant techniques to analyze the function of various genes involved in chemotaxis and associated signal transduction pathways in the bacterium *Azospirillum brasilense*. Several intermediate cloning and DNA manipulation steps will be performed in non-pathogenic *E. coli.* The committee voted to approve the registration pending revision of typographical errors. Procedures will be conducted at BSL-1.

**#354-13 (Paul Dalhaimer) Recombinant DNA & Nanoparticles, III-E (amendment)**
Dr. Dalhaimer's research covers the molecular mechanisms of lipid droplet (LD) formation. LDs are especially prevalent in mammals that are obese or diabetic. Genes encoding neutral lipid synthesis enzymes as well as genes involved in the formation of endoplasmic reticulum are being studied using *Schizosaccharomyces pombe* as a host. Established molecular biology techniques, including cloning, transformation, and homologous recombination will be used to generate recombinant *S. pombe*. Dr.

Dalhaimer's amendment will include the *in vivo* administration (mice) of polyethyleneoxide-polybutadiene diblock copolymers and polystyrene nanoparticles loaded with near-infrared dyes. The containment level was established at BSL-1/ABSL-1. The committee voted to approve the amendment as written. There was one abstention.

**#370-14 (Sara Allstadt) Recombinant DNA & Infectious Agents, III-D-1-a/4-b, 3-year rewrite**
Dr. Allstadt's registration is a continuation of Dr. Amy LeBlanc's clinical trials on dogs with various cancers using oncolytic vesicular stomatitis virus, Indiana-1 (hereafter VSV). This study is in collaboration with Dr. Stephen Russell, MD, PhD, Mayo Clinic. The VSV has been genetically modified to contain a either the human or canine interferon beta gene (hIFNB or cIFNB) as well as a sodium iodide symporter (NIS) gene. Briefly, client-owned animals diagnosed with various cancers (e.g. myeloma) are infused with a therapeutic dose of the recombinant virus, and subsequently monitored for viral-induced toxicities, viral shedding, and overall efficacy of the treatment. Treated dogs are held in ABSL-2 containment for 10 days post-infusion. The study design and containment parameters have been approved by the USDA APHIS Veterinary Services branch. The committee approved the registration as written. There was one abstention.

**Old Business:**

Administrative Report
Brian Ranger provided the committee with the administrative report. Following up on the October 15, 2014 IBC meeting, Dr. Feng Chen's registration (#238-14) was corrected administratively to include his most recent training dates, the source of *M. tuberculosis* genomic DNA (H37RV, genome type-strain), and assurance that the commercial genomic preparation is cell-free (low risk; indicated at BSL-1). Dr. Raul Almeida's registration (#248-14) was corrected administratively to include a spill response/clean-up plan and clarification that additional strains mentioned in Section III of his registration have been and will be used as control strains for several cell cultures based *in vitro* assays and bacterial culture methods. Dr. Jay Whelan's registration (#425) was administratively approved for human derived material use including HEK293 and various prostate normal and carcinoma cell lines. Dr. Hollie Raynor's registration (#426) was administratively approved for human derived materials use including blood samples for routine analysis of hunger-related hormone levels. The following five registrations have been terminated: Dr. Dan Kestler (#251-11); Dr. Nathan Schmidt (#367 & 368); Dr. Graham Hickling (#369); and Dr. Jennifer Schweitzer (#413). All materials have been neutralized, secured, or autoclave-inactivated and discarded.

Teaching Lab Taskforce Update
The taskforce met in November to discuss a revised framework and proposed registration form. The taskforce voiced some concerns regarding applicability of the program to some teaching lab scenarios (e.g. field studies, animal handling, etc.). It was decided to invite Dr. Nobles to the next meeting, scheduled for Thursday, February 12th from 9 am – 10:30 am in PBB 410, so that he can clarify the overall scope and goals of the initiative.

**New Business:**

BSL-3 Discussion
Richard Braswell, Scott Busby, Dr. Robert Denovo, and Dan Smith were present to provide the committee with information about the BSL-3 laboratory space being retrofitted for Dr. Colleen Jonsson's hantavirus research. They addressed the committees concerns about security, infrastructure redundancies

and fail-safes, and maintenance. The committee agreed that standard operating procedures would need to be established, including spill response, entry/exit procedures, etc. prior to allowing Dr. Johnson to use the laboratory space.

UT CVM Preparedness for Client Animals of Ebola Patients (Coan)

Dr. Denovo and Dr. Melissa Kennedy notified the committee that the College of Veterinary Medicine group has identified procedures and locations for emergency boarding and care of companion animals, which may have been exposed to Ebola-infected humans.

BSL-2 Lab Inspection Summary (Phipps)

Dr. Jonathan Phipps presented a summary of the BSL-2 lab inspection findings from Fall, 2014. He noted that there were minor issues with cluttered eyewashes or eyewashes not being checked. One failing lab was noted as being a repeat offender that failed the last inspection (Spring, 2014) for similar concerns, particularly excessive accumulation and poor containment of bagged biowaste. The lab has since been re-inspected with no major concerns noted. However, this example has prompted the Biosafety Office to amend the inspection form/process to address repeat offenders. The committee voted to amend the charter to include a clause that laboratories that repeatedly fail inspections (or are repeatedly cited for the same unsafe practices) are to be subjected to frequent unannounced inspections for a period of 6 months as needed. Laboratories accruing two or more failures will also be reported to the IBC for review.

iMedRIS Updates

Brian Ranger notified the committee that the iMedRIS group is still working on the IRB module to work out bugs, and there is no new information regarding the implementation of the Biosafety module.

Biosafety Staffing

The committee recommended drafting a letter from the IBC suggesting to the Office of Research & Engagement that the Biosafety Office needs additional support staff to address programmatic growth and the implementation of upcoming major initiatives (BSL-3 lab, teaching labs, etc.).

The meeting was adjourned at 4:56 PM.

The next meeting is scheduled for January 21, 2015 at 3 PM.