NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES

SEPTEMBER 20, 2011

CALL TO ORDER / ANNOUNCEMENTS

The NCI-Frederick Institutional Biosafety Committee was convened at 12:04 p.m. in Building 549 Executive Board Room with the following members in attendance:

Voting (Quorum = 9)

- ☒ Michael Baseler
- ☒ Theresa Bell
- ☒ Rev. David Betzner
- ☒ Stephen Creekmore
- ☒ Bruce Crise (12:15 – 12:55pm)
- ☐ Eric Freed (regrets)
- ☐ Melinda Hollingshead (regrets)
- ☒ Stephen Hughes
- ☐ Sarah Hooper (regrets)
- ☐ Scott Jendrek (regrets)
- ☒ Serguei Kozlov (arrive 1:10pm)
- ☒ Dan McVicar (Chair)
- ☒ Randall Morin (left at 1:20pm)
- ☒ Shalini Oberdoerffer
- ☐ Raja Sriperumbudur
- ☒ Lucien Winegar

Non-Voting

- ☒ Walter Hubert
- ☒ Kim DiGiandomenico

APPROVAL OF MINUTES FROM AUGUST 16, 2011 MEETING

The August 16, 2011 meeting minutes were approved as written.
(A motion and second were made. (For: (9) Against: (0) Abstain: (0))

ACCIDENT REVIEWS

Theresa Bell presented two reportable accidents that occurred during the last month. One involved a needlestick post-injection with an experimental drug. The other involved a puncture from a scalpel to the left index finger during specimen collection from a mouse colon. Additional follow-up was needed and more information will be provided at the October IBC meeting.

REVIEW OF PROTOCOLS

NEW REGISTRATIONS

Stefan Ambs 11-41: *Nicotine-induced extraprostatic disease spread in the TRAMP mouse model of prostate cancer* - ***Notification to committee (only using transgenic mouse)***

Patricia Steeg/Natascia Marino 11-45: *In vivo analysis of UGT1A1 and UGT1A9 function in breast cancer metastasis* This is a new proposal to use MDA-MB-231T subclones down-regulating UGT1A1 or UGT1A9 and to inject them into the circulatory system of mice through tail vein injection. At the end of the experiment, the lung metastases in the UGT1A1 or UGT1A9 down regulated cells-injected mice and control cells-injected mice would be counted. The cell lines down-expressing the gene of interest would be amplified in the NIH-Frederick laboratory. The cell injections into the mice and the sacrifice of them at the end of the experiment would also be performed in NCI-Frederick facility. All harvested tissues would then be sent to NIH-Bethesda laboratory for histological analysis. There were concerns raised with how the tail vein injections would be safely

conducted (i.e. would the tail be draped over the finger where the injection is to occur). The committee requested additional language in the SOP regarding the placement of the fingers to the proximity of the injection site. Dan McVicar moved to approve the registry pending the clarifications to the tail vein injection SOP. The revised SOP would be sent to lead reviewers for final approval release. Bruce Crise seconded the motion. For: 10 Against: 0 Abstain: 0

Christopher Westlake 11-49: *Functional Characterization of membrane trafficking genes in primary cilia and tumorigenesis* The goal of these studies is to deliver cDNA and short hairpin RNA (shRNA) for small GTPase Rab proteins and associated membrane trafficking regulators into human cell lines using lentivirus. More specifically, this technology will be used to investigate the role of membrane trafficking regulators in cancer cell behavior and primary cilium signaling. Lentiviral vectors will also be used to introduce shRNA and cDNA into pancreatic cell lines to study the effects on cancer cell behavior in culture and in mouse xenograft studies. There were questions the committee had regarding the animal studies such as how cells will be injected and what the endpoints are and subsequent experiments. One member who had interaction with the PI indicated that the animal work would not occur until 2-3 years from now which may be why there was not much detail regarding the animal work or an Animal Study Protocol (ASP) submitted with this IBC. Steve Hughes motioned to *defer* the registry until clarification was obtained regarding the animal work. If no animal work will be performed at this time, then the references must be removed from the submitted IBC document. Dan McVicar seconded the motion. For: 10 Against: 0 Abstain: 0

RENEWALS

Mark Cosentino 11-32 (P160402WKA02): *DNA Extraction and Sample Handling Lab (DESL)* The DNA Extraction and Sample Handling Laboratory (DESL) extracts, quantitates, and pre-qualifies DNA and RNA for downstream analyses. It also aliquots serum and plasma as needed. Nearly all of the processes are automated, with automatic shut-offs engineered into the systems. Some additional information was requested during the pre-review regarding the Quantifluor ; however, more detail was provided and addressed the safety concerns by the lead reviewers. Shalini Oberdoerffer moved to approve the registry. Bruce Crise seconded the motion. For: 10 Against: 0 Abstain: 0

Kathrin Muegge 11-42 (05-15): *Role of Lsh in development* – BREEDING ONLY - ***Notification to committee***

Ji Ming Wang 11-43 (08-53): *The role of mouse G protein receptor FPR2 in infection, inflammation and cancer* The committee voted to suspend the research involving *Listeria monocytogenes* due to several recent safety concerns and an apparent failure to follow required LASP and ACUC policies and procedures. Within 48 hours of the PI being notified, a member from Environment, Health and Safety (EHS) will visit the PI's laboratory to verify that all *Listeria* work, both *in vitro* and *in vivo*, has been suspended. Additionally, the ACUC will be notified that *Listeria* cannot be administered to animals until all of the pending issues have been clearly resolved and documented. Until the PI can demonstrate to the IBC how the safety concerns involved with the use of the agent, in addition to compliance with applicable policies and procedures, will be addressed and mitigated to minimize hazards and reduce the potential for exposure to staff as well as other employees, no further work with *Listeria* will be permitted. For: 9 Against: 0 Abstain: 0

Ji Ming Wang 11-44 (08-53): *(1) ASP 10-282 Development of transgenic mouse strains overexpressing leukocyte chemoattractant receptor FPR2; (2) ASP-11-011 Development of systemic and conditional FPR2 knockout mice* – BREEDING ONLY – ***Notification to committee***

Anatoli Malyguine 11-46 (06-43): *Evaluation of Immune Responses to Patients Receiving an Adenoviral Vector Encoding Human Aquaporin-1* The Laboratory of Cell-Mediated Immunity, Clinical Services Program, within the Applied/Developmental Research Support Directorate, serves as a contract laboratory for immunological monitoring and assay development. The laboratory's mission is to develop, validate and run immunological assays for NCI investigators and the greater NIH community. For this particular project renewal, the lab will be performing immunological monitoring for a clinical protocol (fibroblasts and peripheral blood cells) utilizing serotype 5 adenoviral (rAd5) vector. The vector will not be generated or propagated in the lab. Based on how samples are processed, hazards with replication competent adenovirus are minimal. The PI also stipulated that anyone with an upper respiratory infection or who is immunocompromised would be permitted to work on the project. The committee had minor comments regarding the use of endogenous vs. exogenous in the document. Steve Creekmore moved to approve the registry with the updates to the language. Steve Hughes seconded the motion. For: 9 Against: 0 Abstain: 0

Randy Stevens 11-47 (P271287MBA05, P271287MBB05, P230304MBA01 and P230304MBB01): *Laboratory Operations of the AIDS Monitoring Laboratory* This IBC outlines the operations of the Aids Monitoring Lab. The AML receives and processes whole blood, blood components, body fluids and tissues from individuals who are naturally infected with one or more of the following pathogens: Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Mycobacterium tuberculosis (TB), Multidrug Resistant Mycobacterium tuberculosis (MDR-TB), Human Herpesvirus-8 (HHV8), Influenza A (H1N1) Virus or Parainfluenza Virus (serotypes 1,2 and 3). This project involves only the manipulation of specimens from patients infected with pathogen, *not* the direct manipulation or propagation of any of the pathogens listed above. The committee commended the PI in the detail to safety throughout the registry as well as within the SOPs. Steve Hughes moved to approve the registry as written. Theresa Bell seconded the motion. For: 9 Against: 0 Abstain: 1 – Mike Baseler, as this is his lab.

OUTSTANDING ITEMS

Trinchieri/Noer – IBC 10-60 Flow cytometry core lab: Waiting on response from PI. Dan McVicar to follow-up.

AMENDMENTS

Thirty-one amendments were processed and approved between the August and September meetings.

OTHER BUSINESS

R. Gorelick 11-03-A1 – Lead reviewer requested full committee review – The IBC voted to defer the amendment request for the HCV work until further information and clarification are obtained. There were questions regarding volumes and concentrations of the agent, the flow of materials and the SOP. The committee also felt it was necessary to see the entire 'cradle to grave' process of the material. Therefore, they have also requested for Julian Bess to submit his portion of the work so that both registries could be reviewed concurrently and to ensure that they compliment one another.

ADJOURNMENT

The meeting was adjourned at 1:50pm.

Next meetings: ***October 18, 2011*** ***November 15, 2011***