

NATIONAL CANCER INSTITUTE AT FREDERICK (NCI@F)
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
NOVEMBER 19, 2013

CALL TO ORDER / ANNOUNCEMENTS

The NCI@F Institutional Biosafety Committee was convened at 12:04 pm in Building 549 Executive Board Room with the following members in attendance:

Voting (Quorum = 8)

- | | |
|----------------------------------------------------------|--------------------------------------------------------|
| <input checked="" type="checkbox"/> Katalin Baranji | <input checked="" type="checkbox"/> Stephen Hughes |
| <input checked="" type="checkbox"/> Michael Baseler | <input checked="" type="checkbox"/> Sarah Hooper |
| <input checked="" type="checkbox"/> Theresa Bell | <input checked="" type="checkbox"/> Serguei Kozlov |
| <input checked="" type="checkbox"/> Rev. David Betzner | <input type="checkbox"/> Dan McVicar (Chair) (regrets) |
| <input checked="" type="checkbox"/> Stephen Creekmore | <input checked="" type="checkbox"/> Randall Morin |
| <input checked="" type="checkbox"/> Bruce Crise | <input checked="" type="checkbox"/> Raja Sriperumbudur |
| <input type="checkbox"/> Eric Freed (regrets) | <input type="checkbox"/> Lucien Winegar |
| <input checked="" type="checkbox"/> Melinda Hollingshead | <input checked="" type="checkbox"/> Enrique Zudaire |

Non-Voting

- Walter Hubert
- Karen Barber

Other

APPROVAL OF MINUTES FROM SEPTEMBER 17, 2013 MEETING

The minutes from the September 17, 2013 meeting were approved as written. A motion and second were made (For: 14; Against: 0; Abstain: 0)

ACCIDENT REVIEWS - None

REVIEW OF PROTOCOLS

NEW REGISTRATIONS

Esta Sterneck – 13-89: Lentiviral vector mediated expression or silencing of C/EBPdelta. The goal of the study is to deliver short hairpin RNA (shRNA) for human C/EBPdelta into human cell lines using lentivirus. Recent studies from our laboratory have illustrated that C/EBPdelta can act like a tumor suppressor or tumor promoter in part depending on cell type and context. By efficiently silencing C/EBPdelta expression with this technology, we will investigate the dual function of CEBPD in different cell types. They plan to silence human or mouse C/EBPdelta with shRNA in cell lines and also in primary mouse embryo fibroblasts and mammary tumor cells. Approved pending a lab observation of the registration procedures. This observation is scheduled for Dec. 3. For: 12; Against: 0; Abstain: 0

Matthew Young – 13-78: Determination of toxicity, pharmacokinetics, scheduling and therapeutic potential of compounds and biological developed at the NCI. The Drug Development Collaborative (DDC) provides the infrastructure to enhance collaborative basic, translational, and clinical research on molecular targets or pathways. The DDC provides intramural investigators with assistance in the development of screening assays

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to identify small-molecule inhibitors and biologic agents to support the pre-clinical development of promising molecularly targeted lead compounds. In the early discovery stages the toxicity, pharmacokinetics and therapeutic potential need to be evaluated in vivo. Approved. For: 11; Against: 0; Abstain: 1

RENEWALS

Richard Lempicki – 13-82: (P180504RLA01 and P150301RLA02): Infectious disease studies in the laboratory of immunopathogenesis and bioinformatics - The Laboratory of Immunopathogenesis and Bioinformatics (LIB), Applied/Developmental Research Directorate, services the Affymetrix microarray core laboratory and provides 454 deep sequencing and molecular biology confirmation support for NIAID labs including basic research regarding host immune response to infectious disease infection. The materials received for the assays and tests come from healthy controls or from patients with HIV, HBV, HCV, Lyme borreliosis, or unknown respiratory infection and may include: cells (primary patient cells and cell lines), blood and blood components (whole blood, serum or plasma), tissues (e.g. liver, gut, lymph nodes, skin), and bronchoalveolar lavage (BAL). Approved pending a lab observation of the registration procedures. This observation is scheduled for Dec. 5. For: 11; Against: 0; Abstain: 1

Natascia Marino – 13-83 (10-57): Metastasis suppression function of NM23-H1 in an animal model of breast cancer – This lab is using the murine mammary carcinoma cell line 4T1 (labeled as 4T1-12B-M) to create a spontaneous metastatic model. The mouse breast cancer cells will be implanted into mammary fat pad of Balb/c mice. Approved. For: 12; Against: 0; Abstain: 0

Stephan Woditschka – 13-84 (10-54): Effect of DNA repair gene overexpression on brain metastatic breast cancer progression - The lab will continue to use the same cells previously approved under the expiring protocol (either in the original submission or as amendments) in intra-cardiac injected mouse xenograft models of brain metastasis development to investigate several clinically relevant questions: (1) Is the interaction of BARD1 with the breast cancer tumor suppressor BRCA1 necessary for the brain metastasis promoting phenotype of BARD1 overexpression? (2) Does BARD1 and RAD51 expression status influence the efficacy of prevention and therapy, such as radiation and brain-permeable chemotherapeutics? (3) Do anti-inflammatory drugs influence the brain metastasis promoting phenotype of BARD1 and/or RAD51 overexpression? (4) Do brain permeable antioxidants increase risk of brain metastasis development? Approval pending clarifications. For: 12; Against: 0; Abstain: 0

Ligia Pinto – 13-85 (10-48): Determine biomarker levels within human specimens in order to evaluate associations with cancer and other diseases using Luminex bead based technology. The objective of this proposal is to test human specimens to determine biomarker levels and associations with cancer and other diseases using Luminex bead based technology. Testing will be performed according to manufacturer's procedure manual for each Luminex bead based assay and standard BSL-2 procedures will be used to perform all testing. Luminex bead based assays are multiplex assays where beads, either magnetic or polystyrene, are conjugated with an antibody against the analyte of interest. Approval pending clarifications. For: 12; Against: 0; Abstain: 0

Peter Gorelick – 13-86(unknown): AHDL health monitoring for NCI rodent colonies in Frederick and Bethesda. Approximately 90% of the animals received by the AHDL are routine sentinel mice that have been exposed to soiled bedding collected from research animals. Approval pending SOP review and form for sample receipt. For: 12; Against: 0; Abstain: 0

Giorgio Trinchieri – 13-87(09-18): Genetically engineered mouse and human cells for discovery and validation of dietary effects on tumorigenesis. The major focus of this project is to identify molecular events that drive

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the process of multistage carcinogenesis and to develop ways to target these molecular events for cancer prevention. Deferred approval for lab and animal facility SOP. For: 12; Against: 0; Abstain: 0

James McMahon - 13-88(09-32): Targeting carcinoma associated fibroblasts. The proposed project – a collaboration between the Molecular Targets Development Program (MTDP) at NCI Frederick and Dr.s Prasun Mishra and Glenn Merlino in NCI's Lab of Cancer Cell Biology and Genetics (LCBG) in Bethesda. MSCs will be obtained from clinical samples, grown in culture, and transformed into CAF-like cells. Approval pending lab visit to determine BSL2 requirements on the pipettor. Lab observation scheduled for November 27, 2013. For: 12; Against: 0; Abstain: 0

OUTSTANDING ITEMS

Dimitar Dimitrov 13-38 (04-04, 08-20): Developing anti-viral vaccines and human antibodies against infectious diseases and cancer antigens by using recombinant membrane proteins of HIV, Nipah, Hendra, Dengue viruses and cancer antigens. Committee requested additional clarifications and a Vaccinia-specific SOP as well as a lab visit. Post-meeting, Theresa Bell learned that the lab was relocating and suggested that the space that will be used for the Vaccinia work should not be evaluated until the move has been completed. **Continue deferral until lab move and observation are completed.** For: 12; Against: 0; Abstain: 0

Lino Tessarollo 13-66 (10-38): Gene expression in mouse primary and established cell lines using Lentiviral and Adenoviral systems. This lab focuses on the analysis of murine models relevant to the study of the function of Neurotrophins and their receptors *in vivo*. The protocol includes cloning through standard molecular biology techniques into retroviral vectors that are then used to transduce cells and induce, or block, specific gene expression to study downstream events. Additionally, the lab will use Cre-expressing Adenovirus to transduce cells to study downstream signaling events. The committee requested additional clarification for the hazards of proteins being manipulated, as statements in Part B were contradictory, and also requested a post-approval lab visit to evaluate how materials are being manipulated. Approval pending lab visit to review registration procedures. Lab visit scheduled for November 20, 2013. For: 12; Against: 0; Abstain: 0

Chuck Ostermeier 13-70 (10-36): Cryopreservation and assisted reproduction of genetically important mice and rats. As a service provided to investigators, this lab will collect and freeze sperm, embryos, and/or ovaries from transgenic, knockout or mutant strains of mice and/or rats. Upon request, pups will be reconstituted from the frozen state and delivered to the investigator. Additionally, assisted reproductive technologies will be utilized to rapidly generate colonies for investigation and to re-derive animals from a contaminated or unknown health status to a specific pathogen free status. The committee expressed concerns with some of the information provided in Section E regarding the 'uncertainties' of some of the materials being received. They requested for the PI to develop a request form, similar to that used in the Transgenic Mouse Core, to assist with determining the hazards involved with the materials being received. Raja Sriperumbudur moved to approve the registry pending the receipt and lead review approval of the requested input form. For: 12; Against: 0; Abstain: 0

AMENDMENTS

Ten amendments were processed and approved between the September and November IBC meetings.

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OTHER BUSINESS

ADJOURNMENT

The meeting adjourned at 2:10 pm.

Next meetings:

December 17, 2013

January 21, 2014