

NATIONAL CANCER INSTITUTE AT FREDERICK (NCI@F)
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
JUNE 16, 2015

CALL TO ORDER / ANNOUNCEMENTS

The NCI at Frederick Institutional Biosafety Committee was convened at 12:05 pm in Building 426 Conference Room with the following members in attendance:

Voting (Quorum = 8)

- Michael Baseler
- Theresa Bell
- Rev. David Betzner (*regrets*)
- Stephen Creekmore
- Bruce Crise
- Eric Freed
- Melinda Hollingshead
- Stephen Hughes

- Sarah Hooper
- Serguei Kozlov (*regrets*)
- Dan McVicar
- Raja Sriperumbudur
- Lucien Winegar
- Sharon Altmann
- Patti Labbe (*regrets*)

Non-Voting

- Walter Hubert (*regrets*)
- Karen Barber
- Ted Witte

Visitors

Sam Denny
Doug Guam
Sivakumarvenkat Vepachedu
Terry Jones
Christina Bergamaschi

APPROVAL OF MINUTES FROM THE MAY 19 MEETING

The minutes from the May 19, 2015 meeting were approved. A motion to approve and a second was made. (For: 11; Against: 0; Abstain: 0)

ACCIDENT REVIEWS :

- ❖ None

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REVIEW OF PROTOCOLS

NEW REGISTRATIONS

- ❖ Sivakumarvenkat Vepachedu – 14-27 – PTEN-long – PTEN-Long is membrane-permeable isoform of PTEN that can be used in therapy of cancers caused by the loss of PTEN. PTEN regulates phosphoinositide 3-kinase (P13K) signaling and thereby controls proliferation and survival. PTEN is frequently deleted or mutated in a variety of human tumors. The objectives of the project for this milestone/feasibility phase are:
 - Produce PTEN-Long and PTEN-Long (C293S) mutants (~25 mg)
 - Fermentation process development to optimize production and yield (~30L)
 - Purification process development which includes optimization of various chromatographic steps, and
 - Product Evaluation and Assay development (ELISA, western blot and etc).

A motion was made to approve by Dan McVicar and seconded by Melinda Hollingshead.
(For: 10; Against: 0; Abstain: 1)

15-24 – Frank Maldarelli: Studies of HIV replication in vivo. We are studying replication of HIV in samples obtained from infected patients. We are interested in the genetics of HIV populations, the sources of HIV persistence, and the development of HIV drug resistance. We study cells and plasma from infected individuals and detect and quantify HIV nucleic acid species. We conduct clinical studies at the NIH Clinical Center and obtain clinical samples for analysis in the laboratory. In process. Deferred to June meeting for further information. A motion to approve pending clarifications was made by Mike Baseler and seconded by Bruce Crise.
(For: 10; Against: 0; Abstain: 1)

- ❖ 15-25 – Ven Natarajan: Quantitation of simian immunodeficiency (SIV) and simian-human immunodeficiency (SHIV) viral RNAs. Plasma and cells from Rhesus Macaques infected with SIV or SHIV will be provided by the NIAID scientists. Total RNA and DNA will be isolated from these samples using commercially available kits. RNA will be converted to complimentary DNA using a reverse transcriptase enzyme. Then the quantity of the SIV or SHIV DNA in these samples will be sestimated using a polymerase chain reaction (PCR) assay. A motion to approve pending clarifications to lead reviewers was made by Sharon Altmann and seconded by Dan McVicar.
(For: 11; Against: 0; Abstain: 0)

RENEWAL REGISTRATIONS

- ❖ 15-21 – Joost Oppenheim: Chemoattractant and chemoattractant receptor structure/function studies. The goal of our research is to better understand the role of chemoattractants in the initiation and prevention of diseases, specifically cancer and autoimmunity. Construction and expression on prokaryote and eukaryote expression vectors will be undertaken to express human and mouse chemoattractant and/or chemoattractant receptors in common cell lines. These vectors will be expressed in prokaryote or eukaryote cell lines for functional studies in vitro. pcDNA based constructs that demonstrate expression and function may be injected into mice by electroporation

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or direct injection for evaluation as preventatives. In order to evaluate signaling between cellular receptors primary mouse fibroblasts from commercially produced Tg or KO mouse strains will be immortalized using standard procedures. Currently we utilize commercially available or previously produced Tg or KO mouse strains and do not plan to produce our own. A motion to approve pending clarifications and post approval observation was made by Steve Hughes and seconded by Lucien Winegar. (For: 11; Against: 0; Abstain: 0)

- ❖ Cheryl Winkler – 15-06 (10-17): Genetics of Complex Diseases. We use RNA, DNA, and human samples to identify genes and variation associated with human diseases. Deferred to June meeting for more information. A motion to approve pending clarifications was made by Theresa Bell and seconded by Mike Baseler. (For: 11; Against: 0; Abstain: 0)
- ❖ Dianne Newton – 15-16 (11-29): Preparation of mixed tumor cultures and fibroblasts from patient derived material. To isolate/purify and characterize mixed tumor cell cultures and fibroblasts derived from human patient biopsies/resections received from NIH Clinical Center and IRB approved Comprehensive Cancer Centers across the USA. A motion to approve pending clarifications was made by Sharon Altmann and seconded by Serguei Kozlov. (For: 11; Against: 0; Abstain: 0)
- ❖ Drs. Pavlakis and Felber – 15-12 (10-58): Gene Transfer and Expression of Cellular and Viral DNA's – This registration focuses on (A) the identification of mechanisms controlling gene expression and (B) the role of molecular adjuvants in optimization of DNA vaccines and of immunotherapeutic agents for cancer therapy. Deferred to June meeting for more information.
- ❖ Stephen Lockett – 14-22 (08-46): Ras project 3 and CCR support. Discovery methods to directly target oncogenic Ras protein, and live and fixed cell fluorescence labeling in support of CCR research. (Zudaire/Hughes/Altmann) Deferred to full committee in August. Awaiting additional documentation. A motion to defer approval to Dan McVicar and Theresa Bell was made by Steve Hughes and seconded by Sharon Altmann. (For: 11; Against: 0; Abstain: 0)

OUTSTANDING ITEMS

- ❖ Ji Ming Wang – 14-46: The role of mouse mFPR2 in the pathogenesis of Helicobacter Pylori. H.pylori infects human stomach to cause inflammation and sometime h.pylori produces peptides that activate a G-protein coupled receptor FPR2 in human and mFPR2 (in mouse, also termed Fpr2) to induce migration of neutrophils and monocytes, therefore may establish a basis for inflammation. The purpose of this proposal is to use mice deficient in Fpr2 to examine their susceptibility to H.Pylori-induced stomach inflammation and potential cancer. A motion to approve with the clarification that a mock observation is to be performed before work begins. **PI has put this observation on hold until June 2015 due to new staffing.**

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AMENDMENTS

Twenty amendments were processed and approved between May and June IBC meetings.

OTHER BUSINESS

- ❖ **EXTENSIVELY DRUG RESISTANT TUBERCULOSIS** – DISCUSSION CONCERNING THE RECEIPT OF A BLOOD SAMPLE FROM A PATIENT INFECTED WITH EXTENSIVELY DRUG-RESISTANT TUBERCULOSIS (XDR-TB). ALTHOUGH LABS HERE IN THE FACILITY ARE APPROVED FOR THE RECEIPT OF CLINICAL SAMPLES, THEY ARE NOT APPROVED FOR THE RECEIPT, HANDLING AND PROCESSING OF SAMPLES FROM PATIENTS WITH XDR-TB. FURTHER INVESTIGATION DETERMINED THAT THE NURSE AT THE NIH CLINICAL CENTER MADE AN ERROR IN SENDING THIS SAMPLE HERE FOR PROCESSING. THE SAMPLE WAS LABELED WITH A CRYPTIC ACRONYM RESULTING IN THE SOURCE OF THE SAMPLE BEING MISUNDERSTOOD BY THE RECIPIENTS HERE. IT IS THE OPINION OF THE IBC THAT RECEIPT AND PROCESSING OF THESE PATIENT-DERIVED SAMPLES IS NOT COVERED BY AN IBC THEREFORE, THE REMAINING SAMPLES ORIGINATING FROM THE XDR-PATIENT SAMPLE SHOULD NOT BE STORED HERE AT THE NCI-FREDERICK. THE IBC RECOMMENDS THAT THE MATERIAL BE IMMEDIATELY SHIPPED BACK TO THE NIH CLINICAL CENTER SOURCE PROVIDER OR DESTROYED ON OR BEFORE JUNE 26, 2015.

ADJOURNMENT

The meeting adjourned at 2:00 pm.

Next meetings:

July 21, 2015

August 18, 2015