NCI-FREDERICK
INSTITUTIONAL BIOSAFETY COMMITTEE
MINUTES
JUNE 15, 2010

CALL TO ORDER / ANNOUNCEMENTS

The NCI-Frederick Institutional Biosafety Committee was convened at 12:10 p.m. in Building 549 Executive Board Room with the following members in attendance:

Voting

- ☒ Michael Baseler
- ☒ Theresa Bell
- ☒ Stephen Creekmore
- ☐ Bruce Crise (regrets)
- ☐ Eric Freed
- ☐ Melinda Hollingshead (regrets)
- ☐ Stephen Hughes
- ☐ Scott Jendrek (regrets)
- ☒ Serguei Kozlov
- ☒ Dan McVicar (Chair)
- ☒ Randall Morin
- ☒ Alberta Peugeot
- ☒ Lucien Winegar
- ☒ Rev. David Betzner

Non-Voting

- ☐ Dianna Conrad
- ☐ Kim DiGiandomenico (regrets)

Other

- ☒ Scott Keimig
- ☐ Karen Barber (regrets)
- ☐ Robert Thomas

APPROVAL OF MINUTES FROM APRIL 20, 2010 MEETING

The May 18, 2010 meeting minutes were approved as written.
(A motion and second were made. (For: (9) Against: (0) Abstain: (0))

ACCIDENT REVIEWS – A comprehensive review for all accidents from May 18 forward will be provided to the IBC members at the July 2010 meeting.

REVIEW OF PROTOCOLS

NEW REGISTRATIONS

Shalini Oberdoerffer 10-30: *RNA processing in cellular development*

The objective of the proposal is to study the role of alternative pre-mRNA splicing in differentiation of peripheral T-cells. To achieve this goal, this lab will employ techniques to generate and modify rDNA following standard cloning procedures, in vitro cell-based assays and the study of animal models. The PI thoroughly addressed all questions the lead reviewers had. Theresa Bell moved to approve the registry as written. Dan McVicar seconded the motion. (For: 9; Against: 0; Abstain: 0)

Dan McVicar 10-25: *Innate immunity to fungal infections*

Wild type and Lat 2 null mice will be challenged with Candida albicans, Saccharomyces cerevisiae, or strains of these yeasts that harbor mutations affecting their production of mannans and mannoproteins. By comparing the response of mutant mice to these strains, the lab hopes to identify the specific pathways affected by LAB and gain further understanding regarding the regulation of inflammation by this protein. The studies will include both in vitro and in vivo experiments. During the pre-review, a concern was raised that pregnancy, diabetes, and those on chemotherapy should be included as immunocompetent individuals. The PI added this statement to his registration. Stephen Creekmore made a motion to approve; Randall Morin seconded the motion. (For: 8; Against: 0; Abstain: 1)

RENEWALS

Robert Wiltrout 10-28 (06-70): *Conditional ablation of dendritic cell populations using CD11c-DTR transgenic mice and diphtheria toxin*

DiphtheriaToxin (DT) will be used for the conditional ablation of dendritic cell populations in CD11c-DTR transgenic mice. These mice were generated expressing the diphtheria toxin receptor (DTR) linked with the green fluorescent protein (GFP) under the expression of the CD11c promoter. Therefore, DCs should express both DTR and GFP which will allow for ablation using DT and tracking capabilities both in vivo and in vitro with GFP expression. The use of the CD11c-DTR mice will allow the lab to examine in vivo the contributing roles that DC have in therapeutic studies of anti-tumor immune responses. The lead reviewers had no outstanding concerns other than to ensure the appropriate procedures and safe work practices were successfully integrated into the SOP document. Serguei Kozlov moved to conditionally approve pending the aforementioned integrations into the SOP; Dan McVicar seconded the motion. (For: 8; Against: 0; Abstain: 0)

Dan McVicar 10-26 (07-36): *Maintenance and production of mutant mouse strains for the study of the role of inflammation in the pathogenesis and therapy of cancer*

This protocol involves the production and maintenance of mutant mouse strains for the study of cancer and inflammation. Various strains harboring a mutation in specific proteins known, or suspected, to be involved in the regulation of inflammation and/or the development of cancer will be maintained. In some cases strains will be crossed with one another to produce a double or triple mutant strain. The strains produced and maintained under this protocol will be used in various studies under animal protocols. The PI thoroughly addressed all questions from the lead reviewers. All wild type strains were removed from the document as they do not require review or registration. The committee also agreed that for future breeding-only protocols, only lead review with notification to the committee was necessary, unless the lead reviewers deferred to full committee review. Serguei Kozlov moved to approve; Randall Morin seconded the motion. (For: 7; Against: 0; Abstain: 1)

Robert Wiltrout 10-27 (06-70): *Therapy of mouse tumors by gene-modified mammalian cells using liposome-DNA complexes, Naked DNA expression plasmids or gene-modified viral vectors*

The objective of these studies is to augment the immune, anti-angiogenic or apoptosis-inducing responses in mice by injecting dendritic cells, tumor cells or fibroblasts that have been modified in vitro to overexpress various tumor antigen, cytokine, chemokine or antiangiogenic genes. Numerous systems will

be employed for these studies, including lenti- and adenoviral vector systems as well as gold nanoparticles that are bound to immuno-therapeutic agents. Lead reviewers indicated that much of the risk associated with this protocol is unknown, given the unknown hazards associated with each individual material; however, after discussion, they and the committee felt that BSL2 work practices and procedures and adherence to applicable SOPs should minimize the risks. They also recommended that staff take the viral vector training and for training and competency of all staff be verified. Additionally, no immunocompromised individuals should participate in the research. Stephen Creekmore moved to approve the registry; Dan McVicar seconded the motion. (For: 9; Against: 0; Abstain: 0)

AMENDMENTS

Twelve amendments were processed and approved between the May and June meetings; while three were processed but remained outstanding as of the IBC meeting date.

OTHER BUSINESS

- The requirements for human cell line pathogen testing was again discussed by the committee, as some investigators have recently questioned the need to re-test a cell line if it has already been screened once, whether by his/her lab or another investigator. A topic raised for discussion focused on the proposal of a revised policy calling for a one-time testing requirement (results must be provided to IBC at the time of IBC registration of the human cell line) with the caveat that there can only be one degree of separation from the original testing entity. Development of a database/spreadsheet to manage cell line screening information was also suggested. Dan McVicar deferred discussions and voting on a revised pathogen screening policy as key members of the committee were not in attendance at the meeting. Dan McVicar will resurrect the discussion via email and will collect all members' individual comments for future discussion and voting at a later IBC meeting.
- Theresa Bell updated the committee on the status of enhancing the current IBC registration form. To date, meetings have continued with Data Management Services (DMS) to discuss the development of a web-to-database form/system and additional guidance was provided to DMS with examples of how they would like the system to look and the desired functionality of the system. DMS has made significant progress in updating the IBC webpage interface to make it more user-friendly. The NIH PI Dashboard system has been reviewed briefly by a few IBC members and does not appear to accommodate the needs of the Frederick IBC at this time, although some applications and information within the PI Dashboard system may prove useful in improving in-house systems and procedures.

- **ADJOURNMENT**

  The meeting was adjourned at 1:25 p.m.

Next meetings: ***July 20, 2010 (549 Executive Board Room)*** ***August 17, 2010 (549 Executive Board Room)***