UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

2101 Main Administration Building
College Park, Maryland 20742
301.405.4945 TEL 301.314.9395 FAX

April 27, 2006

Edward H. Hammond
Director, the sunshine project
P.O. Box 41987
Austin, Texas 78704

Re: Public Information Request

Dear Mr. Hammond:

I am responding to the request of the sunshine project for the "Minutes of all meetings of the University of Maryland, College Park Institutional Biosafety Committee (IBC) since 1 May 2003" as well as a statement whether the University of Maryland, College Park IBC HAS/HAS NOT implemented written policies for the identification, review, and oversight of research involving any of the seven categories of experiments of concern identified by the National Academies of Science in its report *Biotechnology Research in an Age of Terrorism* (the "Fink Committee" report). We are treating your request as made pursuant to Title 10, Subtitle 6 of the State Government Article, Annotated Code of Maryland, the Access to Public Records Act (the "Act").

The copy of the enclosed minutes supplements the materials the University previously disclosed to the project in response to its 2004 request for information. The University redacted limited information from those minutes under the authority of the Act.

As to whether the University has developed written policies in response to certain recommendations of the Fink Committee, the University points out that the National Science Advisory Board on Biosecurity "has started deliberations on the criteria required to distinguish dual use research and will embark upon a process of developing guidelines that may eventually define a role for local review groups, such as IBCs, in the oversight of this arena of research. [As of now, however,] the roles and responsibilities of IBCs have not changed. IBCs should continue to carry out the duties outlined in the NIH Guidelines for Research Involving Recombinant DNA Molecules," which the University of Maryland does. http://www.biosecurityboard.gov/faq.asp#17.

You may seek judicial review of this response in accordance with Section 10-625 of the Act. The University waives the search and copying charges for the enclosed minutes.

Sincerely,

Anne Bowden
University Counsel

TO: IBC Members
FROM: Janet Peterson
SUBJECT: Minutes of 31 January 2005 Institutional Biosafety Committee meeting
DATE: 11 February 2005

Present: D. Stein, Chair; J. Culver; M. Mallino; T. Maugel; T. Ng; K. Nepote; R. Conti; D. Perez; J. Peterson
Absent: E. Baehrecke
Guests: D. Fleming, M. Kotlas, S. Bodison

1. **Opening remarks**
Introductions were made. Jim Culver, UMBI, is the new IBC member.

2. **Minutes of January 2004 meeting**
The minutes of the January 2004 meeting were approved.

3. New registrations
   a. 04-97, [redacted], *Mycobacteria phospholipases C in persistent infections* (reviewers: K. Nepote, T. Ng)
   b. 04-90, [redacted], *New attenuated strains of Mycobacterium tuberculosis* (reviewers: D. Stein, T. Maugel)

[redacted] attended the meeting to present an overview of their proposed research with *Mycobacterium tuberculosis* (Mtb) and to give the committee an opportunity to ask questions. They described the method they are considering for [redacted] to an aerosol generated inside of a box within the biosafety cabinet. This will not be done in the near future, and the equipment has not yet been selected. They were excused from the meeting before committee discussions began. The reviews of their proposed research were read. The committee discussed the need for a documented training protocol for new lab workers, a facility-specific Biosafety Manual with uniform facility procedures, a medical surveillance program (to be developed in conjunction with the University Health Center), and a procedure that defines the logistics of 2 research groups using the same facility. In addition, the committee agreed that the researchers will need to provide an MIC profile (minimum inhibitory concentration) for antibiotics that are effective in treating mycobacterial disease against the strains they plan to use and construct. They should not generate the MIC profile themselves, but should send strains to a company/clinical microbiology laboratory to be tested.

Motion with second: To defer decision on both registrations until the researchers generate further information: Both PIs need to work together and with the biosafety officer to develop a training protocol for new lab workers, a facility-specific Biosafety Manual with facility procedures, a medical surveillance program (to be developed in conjunction with the University Health Center), and a procedure that defines the logistics of how the two groups will coordinate the use of the same facility, along with the comment that we don't foresee problems with their registrations once this material has been submitted. The PIs should submit the material to Janet, who will circulate it to the committee. If

any committee members have questions or concerns or objections to the submitted information, the committee will meet to discuss the concerns. If no concerns, the committee will vote by email. No work at the BL3 level can be initiated prior to the PIs receiving formal approval from the biosafety office. Motion carried.

c. 04-93, [redacted] *Determinants of virulence of* [redacted] *Virus* (reviewers: J. Culver, K. Nepote)

The reviews of the proposed research were read. Discussion followed on the need for integrating procedures for working with 2 different BL3 agents of differing levels of risk to humans ([redacted] in the same facility. It is the consensus of the committee that operating procedures used in this facility **MUST** be geared to those standard operating procedures required by the highest risk agent, and MUST be followed uniformly by both groups at all times.

Motion with second: To defer decision on [redacted] registration pending submission of the following information: A training protocol for new lab workers, a facility-specific Biosafety Manual with standard operating procedures for the facility, a medical surveillance program (to be developed in conjunction with the University Health Center), and development of unified facility SOPs, along with the comment that we don't foresee problems with his registration once this material has been submitted. Although work with [redacted] would not usually require a medical surveillance program, the committee requests a program be developed that is appropriate for individuals working in a facility that also handles [redacted] It is anticipated that the medical surveillance program will be similar to but not as extensive as the one that will be developed for workers handling [redacted] The PI should submit the requested materials to Janet, who will circulate them to the committee. If any committee members have questions or concerns or objections to the submitted information, the committee will meet to discuss the concerns. If no concerns, the committee will vote by email. No work at the BL3 level can be initiated prior to the PI receiving formal approval from the biosafety office. Motion carried.

d. 04-95, [redacted] *Transmission and pathogenesis of* [redacted] *virus* (reviewers: D. Stein, E. Freed)

e. 04-98, [redacted], *Pathogenesis of* [redacted] *viruses* (reviewers: E. Baehrecke, E. Freed)

[redacted] presented his proposed research. In answer to questions from the committee, he noted that he plans to require the use of powered air purifying respirators (PAPRs) at all times by everyone entering the facility. [redacted] was excused from the meeting for the discussion of his registrations, which were discussed together. Eric Freed, a virologist at NCI Frederick who works with HIV in a BSL3 containment facility, was an *ad hoc* reviewer for both. Dan Stein read the review, in which [redacted] The committee suggested that Janet call the CDC concerning containment guidelines for work with [redacted] strain genes. They noted the importance of laboratory staff reporting flu symptoms to the UHC, and that this should be emphasized in the facility SOPs.

Motion with second: To defer decision on both registrations pending submission of facility SOPs, which

must reflect the need for containment level required by the highest risk agent ~~(influenza)~~ to be used uniformly across the facility, medical surveillance plan in place (to be developed in conjunction with the University Health Center), animal and laboratory SOPs. The committee **DOES NOT** support at this time the reduction of containment from [redacted] for the [redacted] as proposed in the "Biosafety guidelines for [redacted] viruses" submitted by Dr. [redacted]. In order for the committee to consider this modification of [redacted] in the future, Dr. [redacted] will need to provide a detailed scientific rationale supporting this [redacted]. The committee did agree that [redacted] is acceptable for the proposed experiments and they do not foresee problems with his registrations once this requested material described above has been submitted. The material should be submitted to Janet, who will circulate it to the committee. If any committee members have questions or concerns or objections to the submitted information, the committee will meet to discuss the concerns. If no concerns, the committee will vote by email. No work at the BL3 level can be initiated prior to the PI receiving formal approval from the biosafety office. Motion carried.

4. **Registrations approved since last meeting**
   a. The committee accepted with no changes the rDNA registrations that had been approved since the last meeting at BL1, and the non-recombinant registrations that had been approved at BL2.
   b. The committee discussed and accepted with no changes the rDNA registrations that had been approved at BL2 since the last meeting. These included:

- **04-06, [redacted] *Analysis of LPS biosynthesis in the Neisseriacaeae.*** Cloning <u>*Neisseria sicca*</u> genomic DNA into *E. coli* K12 and *N. gonorrhoeae.* (Note: Dr. [redacted] was absent from the room when his registration was discussed).

- **04-19, [redacted] *Characterization of the SARS-Co.*** Propagation in *E. coli* K12 of a plasmid containing a cDNA sequence from the <u>SARS</u> virus. The sequence is less than 1/3 of the full-length genome.

- **04-22, [redacted] *Understanding the pathogenicity of Campylobacter jejuni.*** Experiments involve cloning *Campylobacter* pathogenicity genes into *E. coli* K12 and into <u>*C. jejuni.*</u>

- **04-27, [redacted] *Regulation of methyl cycle in E. coli CFT073.*** Cloning *E. coli* genes into uropathogenic *E. coli* CFT073.

- **04-34, [redacted] *IgG transcytosis in genital infections.*** Cloning genes from herpes simplex virus-2 and *Chlamydia trachomatis* into *E. coli* and human cell lines. BSL2 is needed for work with the parent organisms.

- **04-35, [redacted] *A method for identifying new antimicrobial drugs.*** Cloning [redacted] and [redacted] genes from *Salmonella typhimurium* into *E. coli* and *S. cerevisiae.* BSL2 is needed for work with *S. typhimurium.*

- **05-01, [redacted], Recombinant [redacted] for prostate cancer gene therapy.** Cloning human proapoptotic genes into [redacted] virus in cell culture and in animals.

5. **Medical Surveillance**

The committee made the following recommendations for medical surveillance for the 5 new projects discussed. These apply to each proposal as appropriate

- Serum banking will not be recommended
- Periodic monitoring for exposure to [redacted] viruses is recommended. Laboratory staff will go to UHC to have blood drawn, which will be screened by Dr. [redacted]
- Periodic monitoring for exposure to Mtb
- Procedure to follow in case of seroconversion needs to be developed
- Use of prophylaxis for [redacted] group: which drug, and in what circumstances is it taken? What are possible side effects?
- Dr. [redacted]'s research group will require medical surveillance because they are using the same facility as the [redacted] group. However, they will not use antiviral prophylaxis.
- Procedure for reporting symptoms for Mtb and [redacted] workers
- Medical exam before beginning work
- Procedure to be followed in case of accidental exposure (needlestick, animal bite, etc.)

6. **Old business**

a. [redacted] Agriculture suite renovation – The BSL3 containment suite in [redacted] Building is in the process of renovation, with completion expected in summer of 2005. It will be an "enhanced" facility, with additional design features of [redacted] acility.

[redacted]

c. UMBI CARB – The Center for Advanced Research in Biotechnology has been using the UM biosafety office and IBC for review of its recombinant DNA research for the past year.

7. **New business**

a. [redacted] BSL3 renovation – The BSL3 laboratory in the [redacted] Building is undergoing renovation. Plans are for its use for research with Mtb.

b. IBC's role with the National Science Advisory Board for Biosecurity (NSABB) – NIH will establish a National Scientific Advisory Board for Biosecurity, which will provide advice to the Secretary of HHS regarding biosecurity oversight of dual-use research, and develop guidelines for IBC review of dual-use research at the local level.

c. Sunshine Project request – The UM IBC received a request from the Sunshine Project, a watchdog organization with specific interest in biological weapons and biotechnology, for copies of the minutes of the past 2 IBC meetings. NIH requires that institutions make IBC meeting minutes public. UM submitted our minutes, with sensitive information redacted.

8. The meeting adjourned at 3:00 pm.

TO: IBC Members
FROM: Janet Peterson
SUBJECT: Minutes of 5 October 2005 Institutional Biosafety Committee meeting
DATE: 10 October 2005

Present: D. Stein, Chair; J. Culver; M. Mallino; T. Maugel; T. Ng; K. Nepote; J. Peterson
Absent: E. Baehrecke, R. Conti, D. Perez
Guests: M. Kotlas

1. **Minutes of January 2005 meeting**
   The minutes of the 31 January 2005 meeting were approved.

2. **Review of Standard Operating Procedures submitted for Microbiology [redacted]**
   The committee reviewed the following documents that were submitted by [redacted] for their work with M. tuberculosis in the [redacted] Building [redacted] BSL3 laboratory:
   a. Cover letter – point-by-point consideration of IBC's requested information
   b. TB Biosafety Manual
   c. Occupational Health Program
   d. Manual of Standard Operating Procedures
   e. BSL3 – Guidelines [redacted] Studies
   f. Facility Maintenance Plan
   g. MIC discussion

The committee requests the following changes/ additions to the Standard Operating Procedures:

- Add home or cell phone contact information to Emergency Contact List in manuals.
- Add Table of Contents and list of acronyms to the Biosafety Manual.
- Post Emergency Contact List at the entrance to the BSL3 lab and a warning to not enter the lab until one of those individuals has been contacted.
- Add emergency response procedures for UM Facilities Management personnel and for local or county emergency responders to the Biosafety Manual and to the Facility Maintenance Plan. These should include that in emergency situations (e.g., flooding, medical emergency), the PIs must be contacted to assess situation before FM personnel can enter the lab.
- Place a sign in the electrical room that instructs electrician to contact PIs if they have made any changes that would affect [redacted]
- Connect alarms for [redacted] to CCMS so PIs will be notified electronically when alarm conditions occur.
- Post signs by magnahelic gauges to indicate when it is safe to enter. For example, "Do not enter unless gauge reads _____."
- In the Medical Surveillance Plan, Section 4a, change "Following a *significant* exposure," to "Following a *known* exposure."
- Add infection control procedures for handling respirator (washing hands before and after use, policy for re-use/ conditions for changing respirator, storage of respirator) to Biosafety Manual.
- In the Incident Log (Appendix VI) in the *Safety Manual for Conducting studies with* [redacted] *in the biosafety level 3 facility,* add a column to indicate when the situation has been resolved and the PI has been notified. Incident table should have clear sign off that the situation has been resolved and that the PI has been notified.

- The Committee agreed that their previous request for minimum inhibitory concentrations (MIC) for bacterial strains is not needed because only well-documented strains of Mtb will be used. Clinical isolates will not be used.
- Consider the following "What If" scenarios and add to the relevant manuals and Facilities Maintenance Plan:
    - Water coming from lab into corridor
    - Water coming from ceiling onto animal cages
    - Lab worker faints while holding liquid culture

3. Discussion of M. tuberculosis registrations

a. 04-97, [redacted] *Mycobacteria phospholipases C in persistent infections*
b. 04-90, [redacted] *New attenuated strains of Mycobacterium tuberculosis*

The committee discussed the registrations submitted by [redacted] to work with *M. tuberculosis* (Mtb). It was agreed that BSL3 containment is appropriate for the proposed experiments. [redacted] to delete specific genes or a whole region of Mtb. [redacted] C and other [redacted] genes from [redacted] into various strains of *Mycobacterium*, including Mtb. This approval does not include [redacted] which will require a new registration and IBC review and approval.

Motion with second: To approve registration 04-97, [redacted] *Mycobacteria phospholipases C in persistent infections* at BSL3 containment. Motion carried.

Motion with second: To approve registration 04-90, [redacted] *New attenuated strains of Mycobacterium tuberculosis* at BSL3 containment. Motion carried.

4. Old business

~~a.~~ Status of [redacted] Agriculture suite renovation – The BSL3 containment suite in the [redacted] Building is in the process of renovation, with completion expected in early winter of 2005. [redacted]

5. New business

a. More BSL3 labs on the horizon – There are plans for renovating the "old" BSL3 laboratory in the [redacted] Building. There are also plans for constructing 2 or 3 BSL3 laboratories in the [redacted] Building.
~~b.~~ Next meeting – Our next meeting will be scheduled after we receive the Standard Operating Procedures from the 2 lab groups that will use the [redacted]

~~6.~~ Tour of [redacted] Building [redacted] BSL3 lab.

The meeting adjourned at 12:30 pm. and the committee members had the opportunity to walk through the BSL3 laboratory.

TO: IBC Members
FROM: Janet Peterson
SUBJECT: Minutes of 20 December 2005 Institutional Biosafety Committee meeting
DATE: 3 January 2006

Present: D. Stein, Chair; E. Baehrecke; J. Culver; M. Mallino; T. Maugel; T. Ng; K. Nepote; J. Peterson
Absent: R. Conti, D. Perez
Location: Plant Sciences 2107 at 12:00 pm
Date: 20 December 2005

1. **Minutes of October 2005 meeting**
   The minutes of the 5 October 2005 meeting were approved.

2. **NIH requirements for review**
   The committee reviewed the Guide to the NIH Guidelines and discussed the categories of review of rDNA experiments: those requiring prior approval, simultaneous notification, and exempt from registration. NIH has recently clarified its expectations of the conduct of IBC meetings, and has required that the meetings be face to face or via teleconference, and that at least one community member must be present. In addition, experiments requiring approval prior to initiation must be reviewed and approved at a convened meeting of the IBC.

3. **Review of 2005 rDNA registrations requiring BSL2 containment**

   a. **05-17,** [redacted] ***The pathogenesis of infection with recombinant avian metapneumovirus.*** [redacted] review was presented, and the committee agreed to the following containment: BSL1 containment for propagation of *E. coli* K12 containing genes from avian metapneumovirus (AMPV). BSL1 containment for mammalian and avian cell culture containing less than 2/3 of the AMPV genome, and BSL2 containment for cell culture containing greater than 2/3 of the AMPV genome. [redacted] An administrative note was added to recommend the use of [redacted] however, this is not required to protect personnel.

   b. **05-28,** [redacted] ***Role of phospholipases in mycobacterium persistent infections.*** The committee agreed to the following containment conditions: BSL1 containment for cloning DNA encoding mycobacterial [redacted] genes into *E. coli* K12. BSL2 containment for the following: 1) Cloning DNA encoding mycobacterial [redacted] genes into *Mycobacteria marinum* and *M. bovis* BCG; 2) human and mouse cell culture containing mycobacterial genes; 3) human and mouse cell culture infected with *M. bovis* BCG or *M. marinum*; 4) all work with human cell culture. [redacted] containment for experiments involving [redacted] with recombinant *M. bovis* BCG and [redacted] with *M. marinum*, with the requirement to disinfect [redacted] before disposal.

   c. **05-31,** [redacted] ***Signal Transduction Mechanisms in Bacterial Chemotaxis.*** The committee agreed to the following containment conditions: BSL2 containment for cloning the *Salmonella typhimurium* [redacted] gene into *E. coli* K12, and into *S. typhimurium*. The strain of *S.typhimurium* being used has the large virulence-associated plasmid removed.

d. 05-37, [redacted] ***Genomic specification of heme in nutrition and development.*** The committee agreed to the following containment conditions: BSL1 containment for cloning heme and metal related genes into *E. coli* K12 and into *S. cerevisiae*. BSL1 containment for construction of transgenic *C. elegans* with various [redacted] genes. BSL2 containment for work with retroviral plasmids in RetroPack PT67 cells, and subsequent handling of replication deficient retroviral particles.

e. 05-40, [redacted] ***Cell biology of milk secretion.*** The committee agreed to the following containment conditions: BSL1 containment for cloning DNA encoding [redacted] genes into *E. coli* K12 and transfection into cell culture. Work with primary and established human cell lines requires BSL2 containment and BBP training. BSL1 containment for generation of and work with [redacted] containing butyrophilin and xanthine oxidase transgenes. BSL2 containment with sharps precautions for manipulation and infusion [redacted] unless tests for replication competent virus are conducted and demonstrate that the fraction of the viral genome being utilized does not lead to [redacted]

f. 05-41, [redacted] ***Protease activation of [redacted] virus for oncolytic viral therapy*** [redacted] review was read, and the committee agreed to the following containment conditions: BSL2 containment for cloning genes [redacted] in human and chicken cell culture. The existing fusion protein cleavage site of ~~NDV~~ will be modified to be cleaved by either MMP or elastase so that [redacted] can replicate only in tumor cells that express these proteases. No foreign gene is therefore inserted into [redacted]

g. 05-42, [redacted] ***Cloning of [redacted] HA from [redacted] /1203/04 in protein expression.*** [redacted] review was read. The committee agreed to the following approval conditions: Approval for the [redacted] with the following additional conditions, as outlined in the CDC's Appendix A for handling [redacted] strains: 1. The lab has negative pressure; 2. All manipulations of open containers of the virus are performed in a BSC; 3. No other experiments of any kind should be conducted simultaneously in the same room; 4. Personnel should wear PPE including head cover, goggles, [redacted] gown, booties, and double gloves. 5. All staff should receive conventional [redacted] vaccine; 6. Accidental exposures should be reported to the Health Center and treated with antiviral drugs.7. All personnel should be enrolled in the respiratory protection program. Subsequent handling of E. coli and baculovirus containing the [redacted] should be at BSL2 containment. The committee emphasized the importance that no other experiments of any kind may be conducted in the same lab while the virus is manipulated and grown.

4. **Review of 2005 BSL1 rDNA registrations**

a. 05-06, [redacted] ***Major sperm protein as a novel target for reproductive control.*** The committee agreed to the following approval conditions: BSL1 containment for cloning genes encoding [redacted] from various nematodes and green fluorescent protein (GFP) from jellyfish into *E. coli* K12, and for transferring DNA encoding MSP and GFP into *S. cerevisiae* and *C. elegans*.

b. 05-13, [redacted] ***Innate immune responses in Drosophila.*** The committee agreed to the following approval conditions: BSL1 containment for transferring DNA encoding various genes from Drosophila and Drosophila X virus into *E. coli* K12, insect cells in culture, and into Drosophila.

c. 05-15, [redacted] ***Steroid regulation of Drosophila programmed cell death.*** The committee agreed to the following approval conditions: BSL1 containment for cloning various Drosophila genes into *E. coli* K12, and for use of those genes to construct transgenic Drosophila.

d. 05-18, [redacted] ***Production of influenza virus proteins for diagnostic and basic research.*** The committee agreed to the following approval conditions: BSL1 containment for cloning and

expression of cDNA encoding various genes from low pathogenicity avian influenza virus into *E. coli* K12, *S. cerevisiae*, and into the baculovirus virus expression system. The avian influenza virus genes will be obtained from a collaborator and the intact virus will not be worked with or present in the laboratory.

e. **05-25,** [redacted] ***-The role of virus-directed proteolysis in disease development.*** BSL1 containment for the following experiments:
   i. Cloning DNA encoding segments of the Tobacco mosaic virus [redacted] gene and plant [redacted] genes from tomato, tobacco, Arabidopsis into *E. coli* K12, *S. cerevisiae*, *A. thaliana*.
   ii. Construction of transgenic *Arabidopsis thaliana* and *Nicotiana benthamiana* containing the above genes.
   iii. Insertion of the green fluorescent protein gene into tobacco mosaic virus.

f. **05-29** [redacted] ***-Specific locust pathogen, Metarhizium anisopliae sf acridum.*** The committee agreed to the following containment: BSL1 containment for inserting DNA encoding the gene for [redacted] into *Metarhizium anisopliae* sf acridium strain 324, and for infecting locust 5th instar larvae with the recombinant *M. anisopliae*.

g. **05-33,** [redacted] ***-Gene drive potential of transposable elements.*** The committee agreed to the following containment conditions: BSL1 containment for construction of transgenic mosquitoes, *A. gambiae*, with genes encoding [redacted] resistance and green fluorescent protein.

5. **Review of rDNA registrations requiring notification.**
   The committee reviewed those registrations that had been approved in 2005 that require notification simultaneous with initiation, and agreed with the containment recommended at the time of initiation.

6. **Old business**
   a. **Updates from** [redacted]. The committee had no further requests concerning the revised BSL3 safety documents that were submitted by [redacted]
   b. **Status of BSL3 lab renovations.** J. Peterson summarized the status of the university's BSL3 labs that are currently either under renovation or in planning stages.

7. **New business**
   a. New business was deferred until the next meeting, which will be held in late January or early February.

The meeting was adjourned at 2:10 pm.

TO: IBC Members
FROM: Janet Peterson
SUBJECT: Minutes of 1 February 2006 Institutional Biosafety Committee meeting
DATE: 6 February 2006

Present: D. Stein, Chair; R. Conti; J. Culver; M. Mallino; T. Maugel; T. Ng; K. Nepote; J. Peterson
Absent: D. Perez
Location: Plant Sciences 4102 at 1:00 pm
Date: 1 February 2006

1. **Minutes of December 2005 meeting**
   The minutes of the 20 December 2005 meeting were approved.

2. **New registrations requiring IBC review**

   a. 06-01, [redacted] **Modified Tobacco Mosaic Virus Nanotemplates.** The committee agreed to the following containment conditions: BSL1 containment for cloning Tobacco mosaic virus (TMV) [redacted] or the entire Tobacco mosaic virus genome into E. coli K12. BSL1 containment for infecting tobacco plants with recombinant TMV. J. Peterson will check whether his biosafety cabinet is certified annually.

   ~~b.~~ 06-03, [redacted] **Leishmania and host defense.** The committee agreed BSL2 containment for work involving recombinant Leishmania protozoa containing murine [redacted] genes. [redacted]

   c. 06-04, [redacted] **Bioprocess Scale-up Facility.** The committee agreed to Good Large Scale Practice (GLSP, Appendix K of the NIH Guidelines) for large scale culture of 1) *E. coli* BL21 containing DNA encoding the GFP protein; 2) *Pichia pastoris* containing DNA encoding [redacted] and 3) CHO cell culture containing DNA encoding the murine [redacted] gene. GLSP is recommended for large-scale research involving strains derived from host organisms that have an extended history of safe large-scale use. The investigator needs to notify the BSO of future large scale work before it is initiated, so determination can be made if it can be performed at GLSP containment.

   d. 06-10, [redacted] **Expressing an insect selective toxin from scorpions in *M. anisopliae*.** The committee agreed to BSL1 containment for construction of *M. anisopliae* containing the gene for the [redacted] from the scorpion *Androctonus australis*, and subsequent infection of *Manduca sexta* caterpillars with the recombinant *M. anisopliae*

3. **New registrations requiring notification**
   a. 06-05, [redacted] **Structure of DREAM, a calcium sensor for pain control.** The committee agreed to BSL1 containment for cloning a murine [redacted] protein into *E. coli* BL21 and into *S. cerevisiae*.

b. 06-09, [redacted] **Arabidopsis 2010- Discovering transporters for essential minerals.** The committee agreed to BSL1 containment for cloning plant [redacted] genes into *E. coli*, *A. tumefaciens* and *S. cerevisiae*, and transferring the genes into Arabidopsis, tobacco and onion plants.

4. **New business**

a. **2006 meeting schedule.** The committee decided to hold monthly meetings at noon on the first Thursday of the month. Meeting room location preference is Plant Sciences Building or Microbiology Building.

b. **New committee members (community, institutional).** The committee agreed to add 1 community member and 1 or 2 new institutional members. J. Peterson will work with the Chair to identify potential candidates with expertise in relevant areas.

c. **Updated IBC charter.** The committee made several clarifications to the draft revised charter, which will be incorporated into the document and reviewed at the next meeting.

d. **Procedure for [redacted] containment.** The committee discussed the requirements for decontamination of [redacted] They reviewed the current procedures [redacted]

[redacted] the approval letter will state that if the investigator thinks ~~animal~~ containment can be safely reduced to [redacted] Biosafety Level 1, he/she may submit a report for review to the IBC on the testing done on their stocks, describing procedures, results, etc. The IBC will review the report and make the decision whether containment may be lowered. If no report is submitted, or the report does not pass scientific review, [redacted] will stay at [redacted] Biosafety Level 2.

[redacted] BSL2 requires disinfection of [redacted] prior to cleaning. [redacted] labeled with the name of the agent and a biohazard sticker on the [redacted] personnel will be trained in biosafety procedures by the BSO and the Director of [redacted] The PI will submit to the [redacted] an appropriate SOP for implementing BSL2 containment, including the procedures that will be used to decontaminate the [redacted]

The meeting was adjourned at 3:15 pm.

TO: IBC Members
FROM: Janet Peterson
SUBJECT: Draft minutes of 2 March 2006 IBC meeting
DATE: 3 March 2006

Present: D. Stein, Chair; R. Conti; J. Culver; M. Mallino; T. Maugel; T. Ng; J. Peterson
Absent: K. Nepote; D. Perez
Guests: M. Kotlas
Location: Plant Sciences 5112 at 12:00 pm
Date: 2 March 2006

1. **Minutes of previous meeting**
   The minutes of the 1 February 2006 meeting were approved.

2. **New registrations requiring IBC review**

   a. Bioprocess scale-up facility projects
      i. **Host: *E. coli* Rosetta Blue (DE3), Vector: p DEST 17, gene of interest: human [redacted] protein (2/13/06).** The committee agreed to Good Large Scale Practices (GLSP) for culturing large scale quantity of *E. coli* containing the gene encoding the human [redacted] protein (muscle protein).
      ii. **Host: *E coli* BL21, Vector: pET15b, gene of interest: human [redacted] (2/20/06).** The committee agreed to GLSP for culturing large scale quantity of *E. coli* BL21 containing the human [redacted] protein gene.
      iii. **Host: *Saccharomyces cerevisiae*, Vector: pESC-URA, gene of interest: Infectious pancreatic necrosis virus [redacted] gene, Origin (species) of gene of interest: infected Atlantic salmon pancreatic tissues (2/20/06).** The committee agreed to GLSP for culturing *S. cerevisiae* containing the [redacted] gene from salmon infectious pancreatic necrosis virus.

   b. **06-15, [redacted]-Actin cytoskeleton in B cell activation.** The committee discussed the registration. The investigator proposes to use a lentivirus expression system to deliver shRNA to murine cell culture. Risk to researchers is from a needle stick or cut from contaminated sharp object, or contact with broken skin or mucous membranes, which could result in infection and subsequent insertional mutagenesis or activation of an oncogene. The biosafety cabinet in [redacted] should not be used for these experiments since it does not provide user protection. The committee agreed to BSL2 containment, with the following additional requirements: 1. Conduct all work with packaging cells and virus in biosafety cabinet that provides user protection; 2. Avoid use of sharps (needles, glass Pasteur pipets, etc); 3. Wear gloves and lab coat; 4. All personnel who work with the lentivirus vector shall take the online bloodborne pathogens training program, 5. Report all exposures such as needle stick or contact with broken skin to PI and get follow-up care at University Health Center.

3. **New registrations requiring notification**
   a. [redacted] **Reductive iodination.** The committee agreed to BSL1 containment for cloning the gene encoding [redacted] into *E. coli, Pichia pastoris*, and into mouse and human cell culture (HEK293 and CHO). BSL2 containment is required for work with human cell culture.

4. **New business**
   a. **Updated IBC charter.** The committee made several editorial changes to the revised draft committee charter. It was decided to institute 3-year renewable term appointments for members. These changes will be incorporated into the charter for review at the next meeting.

   b. **New committee members (community, institutional).** Bob Ryan, Director of Public Services for the City of College Park, has agreed to serve on the committee. Before the next meeting, the Chair and the BSO will discuss and select potential new committee members from the University.

   c. [redacted]**containment recommendations.** There have been 3 replies to the email concerning [redacted] decontamination at BSL2 containment. The [redacted] will request [redacted] SOPs from the PIs who have [redacted] experiments at BSL2 containment.

The meeting was adjourned at 1:30 pm.