



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, January 21, 2015

Time: 10:00 AM – 12:00 PM

Location: Health Sciences Building T-269

- Members Present:**
1. Michael Agy, Washington National Primate Research Center
 2. Thea Brabb, Comparative Medicine (*Animal Containment Expert*)
 3. H.D. "Toby" Bradshaw, Biology (*Plant Expert*)
 4. Lesley Colby, Comparative Medicine (*Animal Containment Expert*)
 5. Elizabeth Corwin, (*Human Gene Transfer Expert; IBC Vice Chair*)
 6. Jean Haulman, UW Travel Clinic
 7. Stephen Libby, Laboratory Medicine (*IBC Chair*)
 8. Scott Meschke, Environmental & Occupational Health Sciences
 9. Jeanot Muster, Pharmacology
 10. Angela Rasmussen, Microbiology
 11. Mei Y. Speer, Bioengineering
 12. Eric Stefansson, Environmental Health & Safety (*Biosafety Officer*)
 13. Paul Swenson, Seattle-King Co. Dept. of Public Health (*Community Member*)

1. **CALL TO ORDER:** The Institutional Biosafety Committee (IBC) Chair called the meeting to order at 10:01 am. A quorum was present.
2. **REMINDER:** The IBC Chair reminded attendees that any notes that they retain are subject to public disclosure. A statement was also made about conflict of interest and voting on research proposals as described in the IBC Charter. This includes sharing a grant or a familial relationship.
3. **APPROVAL OF MINUTES:**
 - The IBC Chair sought a motion to approve the minutes from the December 17, 2014 minutes meeting.
 - A member made a motion to approve the December 17, 2014 minutes. Another member seconded the motion.
 - The committee voted unanimously, with one abstention, to approve the December 17, 2014 meeting minutes.
4. **BIOSAFETY OFFICER (BSO) REPORT:** The BSO report is for project reviews involving infectious agents and for projects falling under Section III-E and III-F of the *NIH Guidelines*.
 - a. Biosafety Officer Report
 - A new room was added to Dr. Murry's approval.
 - Dr. Hocking renewed a project involving the use of human source material.
 - The PI (principal investigator) of the project "Stem Cell Transplant in Mice" was changed from Dr. Reyes to Dr. Kim.
 - New rooms were added to Dr. Lin's approval.
 - Three new agents (Epstein-Barr virus, hamster cells infected with Epstein-Barr virus, and non-human primate source material) were added to Dr. Taya's approval.
 - Dr. Miller added murine norovirus to his approval.
 - Dr. Skerrett, an established investigator, received a new BUA (Biological Use Authorization) that corresponds with a recently submitted IACUC protocol.
 - Dr. Hague received a new BUA for the use of human blood.
 - Dr. Merrikh added recombinant *Bacillus cereus* and *Bacillus thuringiensis* for use in moths.
 - Dr. Horner added some new rooms for housing ABSL-1 (animal biosafety level) mice.
 - Dr. Neumann added some new BSL-2 (biosafety level) lab space for work with human source material.
 - Dr. Press, an investigator primarily affiliated with Fred Hutchinson Cancer Research Center, received a BUA because he will be using mice with human cells in a UW facility.
 - Dr. Morishima and Dr. Heitkemper each received a new approval for human source material.
 - Dr. Dorschner added a new BSL-2 room to his approval.
 - Dr. Klevit received a new approval for non-exempt *E. coli*.
 - The IBC Chair sought a motion to approve this month's Biosafety Officer Report.
 - A member made a motion to approve this month's Biosafety Officer Report.
 - Another member seconded the motion.
 - The Committee voted unanimously to approve this month's Biosafety Officer Report.

5. INDIVIDUAL PROJECT REVIEWS

1. Abkowitz, Janis, new, *Hematopoiesis*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The overall goal of the project is to understand the role of FLVCR (feline leukemia virus subgroup C receptor) and to develop model systems of normal and abnormal blood cell development.
- Biohazardous agents used on this project include feline leukemia virus, human cells, and lentiviral vectors.
- The investigator still needs to take biosafety training.
- The lab inspection has been completed.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Abkowitz. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Abkowitz, contingent upon the investigator retaking the biosafety training.

2. Katze, Michael, new, *Analysis of cell type-specific transcriptional responses to viral infection using epithelial and primary cell culture models*

- One IBC member declared a conflict of interest.
- The assigned IBC Subcommittee Reviewer presented the Subcommittee Review.
- This is a new BUA application from an established investigator. A subcommittee was formed because the investigator is requesting to use Risk Group 3 agents: Hantavirus (Sin Nombre), MERS-CoV (Middle East Respiratory syndrome coronavirus), and the H7N9 strain of influenza. The work will be conducted in an *in vitro* model. No animals will be infected with any of these viruses.
- The subcommittee discussed containment requirements, including PPE (personal protective equipment) requirements. The committee also evaluated occupational health risks and the environmental exposure risks regarding *in vitro* work with the three agents.
- The subcommittee determined that BSL-3 containment was required for work with these agents (Sin Nombre, MERS-CoV, and the H7N9 strain of influenza).
- Respirators, a standard requirement for BSL-3 work, will be used.
 - All procedures with the potential to generate aerosolized particles must be carried out using respiratory protection. Individuals using respiratory protection must be enrolled in the University of Washington's Respiratory Protection Program and demonstrate competence in wearing a properly fitted respirator following training. Training is mandatory and requires yearly certification.
- An occupational health consult will occur.
 - The subcommittee recommends that the lab personnel receive a seasonal flu vaccine.
 - Language will be added to the BUA letter stating that the PI must offer the seasonal influenza vaccine to anyone who enters the room where work with H7N9 influenza occurs. Receiving the influenza vaccine will be an entry requirement into the room where work with H7N9 influenza occurs.
 - Employee Health Center has been informed of the precise strains that are to be worked with, in case any researcher on this project needs to seek medical attention after an exposure or an illness.

- The committee continued to discuss occupational health. A member suggested that all researchers on this protocol be given a small card to carry in their wallet, which provides details about the agents used on this project and includes information about what kind of symptoms researchers should seek medical attention for. Similar cards are in use on other projects. The cards also include the 24-hour pager number of the Employee Health physician. The committee was in favor of this idea. An EH&S biosafety officer and an EH&S occupational health nurse will make the cards. The committee noted that it would be a good idea to provide these cards for all projects involving BSL-3 (or ABSL-3) work.
- The USDA (United States Department of Agriculture) has issued additional guidelines in regards to Influenza A H7N9, recommending that all personnel working with Influenza A H7N9 avoid contact with any avian species or their housing for 5 days after last day of work with the virus.
 - The subcommittee supports this recommendation, and also recommends that all personnel (including Department of Comparative Medicine personnel) who enter BSL-3 designated rooms where work with H7N9 is performed avoid contact with avian species for the full 5-day period as well.
 - There are no USDA recommendations regarding contact with rodents, the host animal for Hantavirus. However, there have been no documented cases of human to rodent transmission of Hantavirus. There are similarly no recommendations regarding contact with possible host organisms of the MERS-CoV virus.
- A discussion was raised about the possibility of shipping Risk Group 3 pathogens or otherwise removing material (e.g. sterilized RNA) from the laboratory. The investigator has stringent standard operating procedures (SOPs) in place detailing the verification procedures that are conducted to ensure that material is inactivated before any manipulation occurs outside of the BSL-3 suite. Shipment of agents must follow established regulations. EH&S will be reviewing and approving these SOPs. The subcommittee report will be revised to state that the SOPs will be reviewed and approved by EH&S / the biosafety officer.
- In order to reduce the risk of transmission of these agents via fomites, street clothes will be removed and dedicated scrubs will be used in the facility.
- Mouse-adapted H1N1 influenza virus (for *in vitro* use) needs to be added to the BUA letter.
- The draft BUA letter was shown.
- The IBC member who declared a conflict of interest exited the room.
- A memo will be drafted by EH&S and submitted along with the BUA letter to ensure that all requirements are clear to the PI and laboratory staff.
- The IBC Subcommittee Reviewer made a motion to approve the draft BUA for Dr. Katze. A second is not needed since she is the Subcommittee Reviewer.
- The Committee voted unanimously, with two abstentions, to approve the draft BUA for Dr. Katze, with the following conditions. (1) Language will be added to the BUA letter stating that the PI must offer the seasonal influenza vaccine to anyone who enters the room where work with H7N9 influenza occurs and that receiving the influenza vaccine will be an entry requirement into the room where work with H7N9 influenza occurs. (2) Occupational health cards will be given to all researchers working with the three Risk Group 3 agents described on the project. (3) EH&S will review the SOPs associated with this BUA. (4) Mouse-adapted H1N1 influenza virus (for *in vitro* use) will be added to the BUA letter.

- The IBC member who declared a conflict of interest re-entered the room.
3. Gale, Michael, change, *The Host Response to Virus Infection*
- The investigator is requesting the addition of several viruses to his BUA approval. One of these viruses, Hantavirus (Seoul), is a Risk Group 3 agent and was evaluated by a subcommittee. The other four requested viruses (human Alphacoronavirus, murine Betacoronavirus, Enterovirus A, and Enterovirus B) are Risk Group 2 viruses. The work will be conducted in an *in vitro* model. No animals will be infected with any of these viruses.
 - The assigned IBC Subcommittee Reviewer presented the Subcommittee Review.
 - The subcommittee evaluated the containment requirements, occupational health recommendations for laboratory workers, and the appropriate PPE when using Hantavirus (Seoul). The subcommittee also discussed potential environmental exposure risks and what methods can be utilized to prevent those risks.
 - The subcommittee decided that BSL-3 containment was required for work with Hantavirus (Seoul). Respirators, a standard requirement for BSL-3 work, will be used.
 - An occupational health consult will occur. Employee Health Center has been informed of the viruses that are to be worked with, in case any researcher on this project needs to seek medical attention after an exposure or an illness.
 - Wallet cards will be provided to researchers on this project. The cards will state details about Hantavirus (Seoul) and include information about what kind of symptoms researchers should seek medical attention for. The cards will also include the 24-hour pager number of the Employee Health physician. An EH&S biosafety officer and an EH&S occupational health nurse will make the cards.
 - The four Risk Group 2 viruses (human Alphacoronavirus, murine Betacoronavirus, Enterovirus A, and Enterovirus B) will be worked with at BSL-2 containment.
 - A question was raised regarding which section of the NIH Guidelines these viruses fall under. These are wild-type viruses that are worked with in an *in vitro* model, and so they do not fall under the NIH Guidelines.
 - The draft BUA letter was shown.
 - A memo will be drafted by EH&S and submitted along with the BUA letter to ensure that all requirements are clear to the PI and laboratory staff.
 - The IBC Subcommittee Reviewer made a motion to approve the draft BUA for Dr. Katze. A second is not needed since he is the Subcommittee Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Gale.
4. Storb, Rainer, renewal, *Gene therapy for treating cardiomyopathy in a dog model of DMD*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The primary goal of the project is to develop a gene therapy strategy for treating cardiomyopathy in a dog model.
 - The researchers are employed at Fred Hutchinson Cancer Research Center, but the animal work on the project will be conducted at the UW.
 - The investigator is administering AAV (adeno-associated viral vectors) to dogs.
 - The investigator has completed training at Fred Hutchinson Cancer Research Center.
 - One question (23 E and F) on the BUA application needs to be corrected.
 - *Post-Meeting Update: Question 23, the Microorganism Table, does not need to be completed for viral vectors. The investigator already completed the*

gene delivery table, which is the appropriate section of the BUA application to describe information about viral vectors. Question 23 does not need to be revised.

- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Storb. A second is not needed since she is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Storb.
5. Blevins, James, renewal, *Role of Oxytocin Signaling in the Pathogenesis of Diet-Induced Obesity*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall goal of the research is to understand more about the role of oxytocin, particularly in the hindbrain, an area of the brain that regulates how much we eat.
 - The investigator uses AAV and lentiviral vectors in a rat model.
 - Administration of lentiviral vectors to rats will take place at Veterans Affairs Puget Sound Health Care System (VAPSHCS). This BUA is associated with a VA IACUC protocol. Animals will then be transported to UW for additional studies.
 - The investigator completed UW biosafety training. A lab inspection was not needed because he is using a collaborator's lab space that has recently been inspected.
 - A question was raised about the biosafety level of the lentiviral vectors. The work with rats that have previously been administered lentiviral vectors can proceed at ABSL-1 because the vectors were RCV (replication-competent virus) tested.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Blevins. A second is not needed since she is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Blevins.
6. Chamberlain, Jeffrey, renewal, *Systemic Gene Transfer in Non-Human Primates via Recombinant AAV Vectors*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab researches Duchenne muscular dystrophy.
 - Adeno-associated viral vectors and human and non-human primate cell lines are used on this protocol.
 - The lab inspection has been completed, and training records are in place.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Chamberlain. A second is not needed since he is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Chamberlain.
7. MacLellan, Robb, renewal, *Cardiac development and growth, and cardiac regeneration*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab researches the mechanisms underlying the limited ability of cardiac regeneration of the heart.
 - Biohazardous agents used on this project include adenoviral vectors, lentiviral vectors, and human and non-human primate cells.
 - The lab inspection has been completed and training is current.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. MacLellan. A second is not needed since she is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. MacLellan.

- 8. Mizumori, Sheri, renewal, *Neuromodulatory Control of Reward Neurocircuitry***
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies how different brain areas interact during learning.
 - Adeno-associated viral vectors (in a rat model) are used.
 - The investigator should clarify her use of lasers on this project by completing question 100.
 - The Primary Reviewer report mentions that an instance of ‘mice’ should be changed to ‘rat.’ This correction has already been made.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Mizumori. A second is not needed since he is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Mizumori, contingent upon correcting question 100 on the BUA application.
- 9. Savan, Ram, renewal, *Gene regulation of immune genes and the effect on immune responses***
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies the post-transcriptional regulatory elements involved in controlling immune gene dosage.
 - Agents used on this project include gammaretroviral and lentiviral vectors, including human cells.
 - A discussion occurred regarding oncogenes. The investigator self-declared that about 15 of the genes used on this project are potentially oncogenes. However, he is working with the 3’ untranslated regions. The oncogene region is not being expressed. The vectors are third generation.
 - The committee discussed whether these genes should be considered oncogenic and whether there is a need for raised containment. The committee decided that there is no need to elevate the containment level. BSL-2 containment is appropriate.
 - The investigator uses blood from patients known to be positive for HCV (hepatitis C virus). Universal precautions will be used. BSL-2 containment is appropriate.
 - The lab inspection has been completed and training records are in place.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Savan. A second is not needed since he is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Savan.
- 10. Tian, Rong, renewal, *Energetics and Metabolism of the Heart***
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall goal of this research is to study the role of mitochondrial function and cell metabolism in normal and diseased hearts.
 - Biohazardous agents used on this project are adeno-associated viral vectors and adenoviral vectors, as well as human cells.
 - The draft BUA letter was shown.
 - For clarity, EH&S has decided to list human iPS (induced pluripotent stem) cells separately on the BUA approval letter. These cells would previously have been listed as “Human cells transduced with lentiviral vectors.”
 - The lab inspection has been completed and training records are in place.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Tian. A second is not needed since she is the Primary Reviewer.

- The Committee voted unanimously to approve the draft BUA for Dr. Tian.

11. Mougous, Joseph, renewal, *Type VI secretion-dependent interbacterial interactions*

- The assigned IBC Subcommittee Reviewer presented the Subcommittee Review.
- The investigator is requesting to conduct a new study involving ticks. The PI will study the mechanisms by which ticks interact with the pathogens they transmit, including the Lyme disease agent, *Borrelia burgdorferi*.
- In the proposed study description, infected ticks will be intentionally placed on mice for the purpose of feeding. Ticks will be allowed to feed for 3 to 5 days. The key issue discussed by the subcommittee was the appropriate containment of infected ticks and mice with feeding ticks.
- Lyme disease is a zoonotic disease that is transmitted to humans by ticks of the genus *Ixodes*. These ticks develop to adulthood and reproduce on deer, but the intermediate life stages will also feed on mice, which are the main reservoir of *B. burgdorferi*.
 - The disease in humans is characterized by an erythematous skin rash, fever, muscle and joint pains. Later, a patient may develop meningoencephalitis, evidence of myocarditis, and a recurrent arthritis.
- *B. burgdorferi* is a Risk Group 2 agent and has been assigned to BSL-2. This is our first project that proposes to use live ticks in an animal model. The BMBL (Biosafety in Microbiological and Biomedical Laboratories, published by the CDC) does not specifically address containment of arthropods and endorses the “Arthropod Containment Guidelines.” These guidelines were developed by the American Committee of Medical Entomology, which is a subcommittee of the American Society of Tropical Medicine and Hygiene. The risk assessments and practices are designed to be consistent with the NIH guidelines and the BMBL.
- The project involves administration of *Borrelia burgdorferi* to mice via subcutaneous injection. Ticks will then be allowed to feed on the infected mice, and subsequently on naïve mice, to measure the frequency of transmission of the pathogen.
- The PI has developed SOPs that address manipulation of ticks and the housing of mice that have ticks intentionally placed on them for purposes of feeding.
 - The proposed animal caging system utilizes a double cage system. Mice are housed in a static mouse cage on a wire rack with a thin layer of sterile water in the bottom. This cage will be placed in a larger static rat cage. Ticks that are engorged, or have failed to feed, will fall off into the water.
 - Procedures for inventory of ticks are in place.
 - Mice are housed singly to prevent interactions with other mice.
 - Member of the research team spent time in the lab of their collaborator doing the same work.
 - Research staff will wear light-colored clothing and will work on light-colored surfaces.
 - Ticks are obtained from either Oklahoma State University or BEI resources and are certified free of tick-borne pathogens.
 - All work with ticks that are infected will only occur in the room assigned by Comparative Medicine.
- A potential room has been identified. The room was previously an ABSL-3 room. Many safeguards are already in place. For example, there are no floor drains present in the room.

- The room will be inspected once it is set up. The cages proposed above have not yet been purchased.
- EH&S will review and approve all of the SOPs relating to the tick and mouse work proposed on the project.
- The IBC Subcommittee Reviewer made a motion to approve the BUA application pending approval of the SOPs and the lab inspection. Another member seconded the motion.
- The Committee voted unanimously to approve the draft BUA application for Dr. Mougous, pending successful completion of a lab inspection and final approval of the SOPs.

12. Fuller, Deborah, change, *Immunogenicity and Efficacy of DNA Vaccines and Therapies Against Influenza*

- The investigator is studying a novel antiviral drug and is requesting to use two strains of influenza that are reassortants of avian influenza strains and the mouse-adapted strain PR8.
- Last month, this project was assigned to a Primary Reviewer, who explained there is potentially a small chance that the investigator could possibly make the virus more virulent to humans as an accidental consequence of serial passaging the influenza virus through mice. The committee decided to form a subcommittee to research and discuss this issue.
- NIH (National Institutes of Health) was consulted. EH&S asked if the proposed work would be considered “gain-of-function” research (currently subject to federal review and a funding pause). The Fuller project is not federally funded, and so NIH did not perform a formal review. NIH indicated that if the project had been formally reviewed, the research described would likely be granted an exemption. NIH asked the IBC perform a risk assessment and determine appropriate biocontainment levels and requirements. NIH has also asked EH&S to provide them with a copy of the IBC review.
- The subcommittee researched the appropriate biocontainment levels and consulted recommendations published by the CDC, which produced the two virus strains.
 - The first reassortant virus Dr. Fuller proposes to use, Influenza A virus A/Vietnam/H5N1-deltaH5-PR8, is an *in vitro* constructed virus produced by the CDC.
 - It contains six internal genes from A/Puerto Rico/8/1934(H1N1), a mouse adapted BSL-1 virus, and HA (hemagglutinin) and NA (neuraminidase) from A/Vietnam/H5N1/1203/2004. The polybasic amino acid cleavage site has been removed.
 - The CDC recommends working with Influenza A virus A/Vietnam/H5N1-deltaH5-PR8 at BSL-2 with BSL-3 practices.
 - The subcommittee agreed with this recommendation. The IBC discussed this recommendation. The IBC is also in agreement with this recommendation and will require that all *in vitro* work with this strain to be conducted at biosafety level 2 (BSL-2) with BSL-3 practices.
 - The second reassortant virus Dr. Fuller proposes to use, Influenza A virus A/Hong Kong/H9N2-PR8, was also produced by the CDC.

- It contains 6 internal genes from A/Puerto Rico/8/1934 (H1N1), a mouse adapted virus, and HA-NA genes derived from the parental virus A/Hong Kong/33982/2009 (H9N2).
 - The CDC recommends using BSL-2 containment for all *in vitro* work with Influenza A virus, A/Hong Kong/H9N2-PR8.
 - The subcommittee agreed with this recommendation. The IBC discussed this recommendation. The IBC is also in agreement with this recommendation and will require that all *in vitro* work with this influenza strain be conducted at BSL-2.
- Dr. Fuller proposes to work with both influenza strains in an *in vivo* mouse model.
 - There is a remote possibility that mutations that accumulate during serial passage through mice might increase infectivity for humans. It is also possible that these mouse-adapted strains have the potential to recombine with circulating influenza strains.
 - Therefore, the subcommittee recommends that any work with either influenza strain listed above that involves serial passage in mice to generate more infective or increased lethal derivatives must be conducted at ABSL-3.
 - The IBC discussed this recommendation. The IBC agrees with this recommendation and will require that all *in vivo* work with either influenza strain listed above be conducted at ABSL-3.
- The subcommittee also made several additional recommendations.
 - The subcommittee discussed whether to require the use of a respirator (N95 or PAPR) to reduce aerosol exposure. Respirators will be worn in all ABSL-3 spaces used on the project.
 - The subcommittee also discussed the possibility of requiring sequencing after mouse adaptation to define mutations associated with increased mouse lung replication and to ensure continuing NA inhibitor susceptibility. The subcommittee decided that this would not be a requirement.
 - The subcommittee also discussed whether to require time limits around FluMist and flu-like illnesses for lab workers to reduce the chances of a recombination event *in vivo*. The subcommittee recommends that any lab personnel who have received the FluMist influenza vaccine or suffered a flu-like illness must refrain from working with either of these influenza strains for a 7-day period.
 - The subcommittee discussed whether to require that the investigator separate *in vitro* work with these two strains (in space and time) from work with other strains.
 - The IBC discussed these recommendations. The IBC agrees with the subcommittee's findings and recommendations.
- An occupational health consult will occur. Employee Health Center has been informed of the viruses that are to be worked with, in case any researcher on this project needs to seek medical attention after an exposure or an illness.
- Wallet cards will be provided to researchers on this project. The cards will state details about the influenza strains used on this project and include information about what kind of symptoms researchers should seek medical attention for. The cards will also include the 24-hour pager number of the Employee Health physician. An EH&S biosafety officer and an EH&S occupational health nurse will make the cards.

- A memo will be drafted by EH&S and submitted along with the BUA letter to ensure that all requirements are clear to the PI and laboratory staff.
- The Committee voted unanimously to approve the draft BUA for Dr. Fuller.

ADMINISTRATIVE UPDATES:

- The IBC charter has been revised.
 - In section 4, all of the membership requirements of the IBC were more fully described.
 - In section 4, language about the Vice Chair position was added.
 - Section 14 was newly created to address the existing IBC training policy (see below).
 - Completion of EH&S Biosafety Training is required every three years for PIs if their research includes the use of biohazardous agents. It is also required for students, fellows, laboratory managers, research staff, and all other staff who have the potential for exposure to biohazardous agents.
 - Completion of the EH&S Bloodborne Pathogens (BBP) training is required annually for PIs, students, fellows, laboratory managers, research staff and all other staff who have the potential for exposure to human blood or other potentially infectious material (OPIM), as required under the Washington State Bloodborne Pathogens Rule.
 - The IBC Chair sought a motion to approve the 2014 revision of the IBC Charter.
 - A member made a motion to approve the 2014 revision of the IBC Charter. Another member seconded the motion.
 - The committee voted unanimously to approve the 2014 revision of the IBC Charter.

ISSUES FROM THE FLOOR & PUBLIC COMMENTS:

There were no issues from the floor, and no public comments.

MEETING ADJOURNED AT APPROXIMATELY 12:10 pm.