



William H. Wunner, PhD

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November 2, 2006

Edward H. Hammond
The Sunshine Project
1920 Stuart Street
Berkley, CA 94703

Dear Mr. Hammond:

In response to your letter of 11 October 2006, I enclose the IBC Minutes of meetings held since April 2004 at The Wistar Institute. With my letter dated June 4, 2004 (see copy enclosed), I submitted the IBC Minutes up to April 2004. I expect you have those in your files. In the future, should you request minutes of our IBC activities, you might address your request to me directly, otherwise, your request may not be received without a name (offices locations do change). I trust the enclosed Minutes from July 21 and November 17, 2004, March 15 and June 15, 2005, and June 14, 2006 will fulfill our requirement to be in compliance with the public access provisions of the NIH Guidelines.

Sincerely,

William H. Wunner, Ph.D.
IBC, Chair

cc. Elizabeth O'Brien

encl.



The Wistar Institute is a National Cancer Institute-designated Cancer Center.



William H. Wunner, PhD

Professor

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June 4, 2004

Edward H. Hammond
Director
The Sunshine Project
101 West 6th Street, Suite 607
Austin, TX 78701

Dear Mr. Hammond:

In response to your letter of 30 January 2004, I enclose the IBC Minutes of meetings held in January, February, March and April 2004 at The Wistar Institute. I trust these Minutes will fulfill the requirement for your national survey of compliance with the public access provisions of the NIH Guidelines.

Sincerely,

William H. Wunner, Ph.D.
IBC, Chair

cc. Elizabeth O'Brien

encl.



The Wistar Institute is a National Cancer Institute-designated Cancer Center



Institutional Biosafety Committee (IBC) Meeting
Wednesday, June 14, 2006 – 10:15 a.m.
The Wistar Institute Family Room

Minutes

Members Present: Drs. Barry Stein (*Community Member*), Cathy Calkins (*Community Member*), Ronald Collman, Elliot Levine (*Ex Officio*), Paul Lieberman, Robert Rovinsky (*Safety Officer*), and William Wunner (*Chair*)

Members Absent: Drs. Thanos Halazonetis and Pamela Sankar

Members Voting by Mail: Dr. Peter Curtis

Dr. Bill Wunner introduced Dr. Barry Stein to the IBC. Dr. Stein is a scientist recently retired from Ben Franklin Technology Partners of Southeastern Pennsylvania where he was Vice-President. He said that Dr. Stein is currently working with staff from the University of Pennsylvania on nanotechnology projects involving the development of programs to support the teaching of nanotechnology in schools.

Old Business:

- A. The March 15, 2006, minutes were reviewed and approved.
 The revised June 15, 2005, minutes were reviewed and approved.
- B. Report of Recombinant DNA Registration Documents that were reviewed and approved utilizing expedited procedures since the last convened IBC meeting of March 15, 2006:

A report of registration documents reviewed and approved by expedited procedures since the last IBC meeting of March 15, 2006, was presented as shown below:

Full Committee IBC approval:

IBC #	Last Name	First Name	Study Title	Approval Date
2605264	Fraser	Nigel	HSV Vectors Expressing b-Glucuronidase	6/1/2006 IBC-approved by mail.

Amendment approvals by IBC Chair:

IBC #	Last Name	First Name	Study Title	Approval Date
2502244	Herlyn	Dorothee	Use of Recombinant Vaccinia Virus for Vaccine Studies	6/1/2006 Chair approved amendment to extend IBC-approved registration document to cover an additional animal protocol.

The report of registration documents approved by expedited procedures since the last full IBC meeting of March 15, 2006, was reviewed and approved.



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New Business:

- A. The following Registration Documents were reviewed at the June 14, 2006, IBC meeting and approved pending revisions as listed below:

1) IBC #: 2606265

PI: Nadia Dahmane, Ph.D.

Title: Injection of Lentivirus-infected Human Brain Tumor Cell Lines in Mice (Xenograft)

Section 6b: State what are the packaging cell lines used to produce recombinant virus.

Section #7: State the percentage of native viral genome remaining.

Section #8: Answer the question regarding replication competence "Yes" or "No."

Section #11b: "No perceived risk" is not an adequate answer. State that risk is minimal and will be further minimized by the use of BSL-2 facilities.

Section #11c: Answer "Yes" or "No." If the answer is "No," clarify.

2) IBC#: 2606266

PI: Nadia Dahmane, Ph.D.

Title: Injection of Lentiviral Particles in Mouse Brains

Section #7: State the percentage of native viral genome remaining.

Section #8: Answer the question regarding replication competence "Yes" or "No."

Section #11b – Address the question of perceived risk.

Section #11c: Answer "Yes" or "No." If the answer is "No," clarify.

3) IBC#: 2606267

PI: Dorothee Herlyn, D.V.M.

Title: *Salmonella typhimurium* (attenuated) as a Carrier of a Ubiquitin-mini EPG Fusion Gene to Vaccinate Mice

Section 3B – Does pCMVF3Ub carry an antibiotic resistance gene? Which one?

Section 3C – Note what additional reagents or mutagens will be used.

Section #9 – Identify drug resistance marker gene for sake of knowing what antibiotics might not work in therapy.

Section 11b – How is *S. typhimurium* attenuated? Document its safety. Comment on whether or not it is resistant to any antibiotics.

4) IBC#: 2606270

PI: Hildegund Ertl, M.D.

Title: Vaccines to Infectious Agents (Adenovirus)

Section #3B – Add information on AdC6 and AdC7 (describe their genome structures – not just that it is very similar to AdC68).

Section #3E – High titers are used not for replication (explain more fully why high titers are required).

Section #11b – Acknowledge potential oncogenicity of E6 joined to E7 or provide data (literature) documenting fusion is non-oncogenic. State that risk will be minimized by use of BSL2 facilities and practices.

Section #13 – Answer the question.

B. The following Registration Documents were approved as submitted at the June 14, 2006, IBC meeting:

1) IBC#: 2606268

Title: Knockdown of 12/15 Lipoxygenase in Hematopoietic Progenitor Cells

PI: Ellen Pure, Ph.D.

2) IBC#: 2606269

Title: The Role of 12/15 Lipoxygenase (12/15 LO) in Chronic Myelogenous Leukemia (CML) and Myeloid Development

PI: Ellen Pure, Ph.D.

C. The Registration Document Amendment, shown below, was reviewed at the June 14, 2006, IBC meeting and approved pending the revisions shown below:

IBC #: 2603262

PI: Hildegund Ertl, M.D.

Title: Vaccines to Infectious Agents

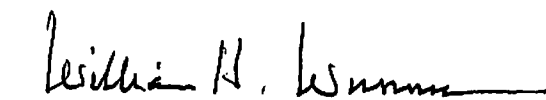
Section A: Describe purpose of amendment more fully: 1) List all of the recombinants described in section D3 of animal protocol #111830 that you are requesting this amendment to cover. Is AdC68 (as well as the other vectors you are using in animal protocol #111830) going to be used as is or as a recombinant Adenovirus? If yes, what inserts are included from IBC registration document #2603262? 2) State how animal protocol #111830 differs from animal protocol #111962 in regards to the use of these recombinants?

F. Other Business.

During the review of Dr. Dorothee Herlyn's rDNA registration document, #2606267, a separate discussion regarding the Research Safety Form developed. It was noted that question #13 of the current version of the rDNA registration document requests that PIs attach the Research Safety Form to their rDNA registration document if they answer "yes" to the use of microbiological agents and hazardous chemicals at question #13. It was determined that the purpose of the Research Safety Form was primarily to assist the biosafety officer in assessing the potential hazards of using microbiological agents and hazardous chemicals in conjunction with rDNA. It was decided that asking PIs to attach the Research Safety Form to the rDNA registration document would necessitate a duplicate review of the form. It was resolved that a request to have the Research Safety Form attached to the rDNA registration document would be removed. This request will be replaced with a directive to contact the Environmental Health and Safety Office to complete the Research Safety Form, which it maintains.

The meeting adjourned at 11:45 a.m.

MINUTES APPROVED BY:



William H. Wunner, Ph.D., Chair

WHW/afw



Institutional Biosafety Committee Meeting
Wednesday, June 15, 2005 – 10 a.m. – The Wistar Institute Family Room
Minutes

Members Present: Cathy Calkens (Community Member), Ronald Collman, Peter Curtis, Elliot Levine (*Ex Officio*), Paul Lieberman, Robert Rovinsky (Safety Officer), Pamela Sankar and William Wunner (Chair)
Members Absent: Thanos Halazonetis

A. November 17, 2004 IBC Minutes

Each section of the minutes of the 11/17/04 IBC meeting was reviewed and summarized for the IBC by Dr. Bill Wunner.

Dr. Collman asked Dr. Wunner if it was correct to list him as a Community Member.

Dr. Wunner responded that neither he nor Dr. Pamela Sankar are considered to be community members because of Wistar's close association with the University of Pennsylvania and that going forward they would not be listed as community members. He stated that Dr. Calkins is considered a community member and that he is still looking to add an additional community member to the IBC. Following the review, the minutes were unanimously approved as submitted.

B. A Report of Recombinant DNA Registration Documents that were reviewed and approved utilizing expedited procedures since the last convened IBC meeting of 11/17/2004 was presented for review and approval as shown below:

IBC #	Last Name	First Name	Study Title	Approval Date
2412240	Albelda	Steven	Use of Adenoviral Vectors to Treat Mouse Tumors	12/17/2004
2412241	Lieberman,	Paul	Immortalization of Human B-Lymphocytes with EBV	12/17/2004
2412242	Herlyn	Dorothee	Targeting Mutated Epidermal Growth Factor Receptor (EGF-R)	1/2005 reviewed - This document was cancelled prior to finalization of approval.
2501243	Fraser	Nigel	Construction of a replication-limited herpes simplex virus (HSV1716) that specifically replicates in melanoma cells	1/2005 reviewed – This approval is not finalized as animal portion of study is still pending approval.
2502244	Herlyn	Dorothee	Use of Recombinant Vaccinia Virus for Vaccine Studies	3/4/2005
2502245	Ertl	Hildegund	Vaccines to Rabies Virus, Human Papilloma Virus and Human Immunodeficiency Virus	3/14/2005
2502246	Albelda	Steven	Use of a Recombinant Strain of Listeria Monocytogenes as a Cancer Vaccine	3/3/2005
2503248	Dahmane	Nadia	Role of 2NF238 in Brain Development	3/15/2005

Amendment Submissions: None.

Report of IBC registration documents reviewed and approved via expedited review since the last convened IBC meeting of 11/17/04 was approved as submitted.



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C. The following Registration Documents were reviewed at the June 15, 2005, IBC meeting:

1) The registration document shown below was reviewed and approved as submitted:

Principal Investigator: Paul Lieberman, Ph.D.
Study Title: Making Deletions in Epstein-Barr Virus and Kaposi's Sarcoma-Associated Herpes Virus Using Recombineering Technology in E. Coli
IBC #: 2506252

2) The registration document shown below was granted conditional approval, with final approval pending submission of the information listed below:

Principal Investigator: Joseph Kissil, Ph.D.
Study Title: Elucidation of Genetic Events Underlying Lung Adeno-carcinoma
IBC #: 2505250

Revisions requested:

Section 6: Specify if transgenic mice are host.
Section 8: Specify adenovirus serotype and gene deletion.

Final disposition:

PI provided revisions and approval was finalized.

3) Approval of the following documents was denied. The IBC requested that they be revised as specified below and resubmitted:

Principal Investigator: Meenhard Herlyn, DVM
Study Title: Injection of Recombinant Adenovirus into Mice
IBC #: 2505249

Revisions requested:

Section 3: Provide brief description of experiment including routes of inoculation and maximum dosages. Indicate if Adenovirus-5 is replication-incompetent. Specify nature of ET-3, SCF, and bFGF.
Section 4: Change GTP to GFP.
Section 8: Specify if Adenovirus-5 is replication-incompetent. Is this E1a-deleted?
Section 9b: Provide full names of genes.
Section 10: Change to risk group 2.
Section 11b: Answer is not accurate. Should this be "none"?

Final disposition:

PI withdrew submission of this protocol because the animal section of the study was discontinued.

(Protocols tabled at the June 15, 2006, meeting continued)

Principal Investigator: Meenhard Herlyn, DVM
Study Title: Injection of Recombinant Lentivirus into Mice
IBC #: 2506251

Revisions requested:

Section 3: Specify nature of all genes to be inserted. Provide brief description of experiment including routes of inoculation and maximum dosages in animals.

Section 4: Change GTP to GFP.

Section 8: Provide specific information on construction and assembly of lentivirus vector.

Section 9b: Define the proteins completely.

Section 10: Change to risk group 2.

Section 11b: Answer is not accurate. Should this be "none"?

Final disposition:

PI withdrew submission of this protocol because the animal section of the study was discontinued.

Principal Investigator: Ellen Heber-Katz, Ph.D.
Study Title: Reconstitution of Irradiated Mice with Bone Marrow Cells
IBC #: 2506253

Revisions requested:

Section 3: Provide route of inoculation and maximum dose. Change "red GFP" to RFP.

Section 6a: Provide mouse strain. Is it transgenic?

Section 6b: Provide species of cells.

Section 7: Please provide percentage of genome.

Section 8: Provide more information on lentivirus vector, e.g., "replication-defective HIV-based vector pseudotyped with VSV-G."

Section 11b: Define and describe "little or no risk."

Final disposition:

PI submitted a revised protocol and approval was finalized effective July 19, 2005.

(Protocols tabled at the June 15, 2006, meeting continued)

Principal Investigator: Ellen Heber-Katz, Ph.D.
Study Title: Reconstitution of Irradiated Mice with Bone Marrow Cells
IBC #: 2506254

Requested revisions:

Section 3: Define PAR-1. Provide complete description of experiment including routes of inoculation and maximum dosages in animals.
Section 6a: Provide mouse strain.
Section 6b: Provide answer.
Section 7: Please provide percentage of genome.
Section 8: Provide more information on lentivirus vector, e.g., "replication-defective HIV-based vector pseudotyped with VSV-G."
Section 10: Please answer. Should be risk group 2.
Section 11b: Define and describe risk.
Section 16: Please sign.

Final disposition:

PI submitted a revised protocol and approval was finalized effective July 19, 2005.

D. Other Business

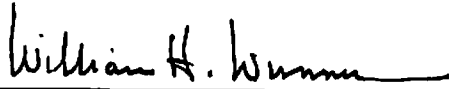
- 1) Dr. Bill Wunner made introductions of the IBC members to Dr. Cathy Calkens, a newly appointed IBC member.
- 2) An article entitled "Introduction for "Safety Considerations for Retroviral Vectors: A Short Review" by Donald E. Mosier was presented for discussion by Dr. Bill Wunner. He asked the IBC to consider whether or not this article should be made available to all of the Wistar Researchers. He asked the IBC if the safety guidelines presented in the article were something that the IBC should require Wistar researchers to follow. It was stated that if Wistar researchers were planning to make their own retroviral vectors they might need to follow these guidelines if they were assuming that their viruses were replication incompetent. However, it was felt that the procedures described in this article might be burdensome for researchers using a wide range of vectors derived from commercial vendors.

It was asked if the Institute provided any formal training for researchers working with various viral vectors, especially for young researchers. It was stated that up until now, such training has always been left up to the PIs. The Safety Officer, Bob Rovinsky, asked for suggestions regarding how this could be implemented. It was suggested that an online training resources be considered, which could be presented possibly 3 times per year as an example. It was suggested that the Biosafety Officer look into seeing if the regulatory offices provide any resources for implementing such training. This training would then be required in order to obtain approval for the use of cloned genetic materials.

(Other business continued)

It was asked in what sort of experiments did the author of the article observe recombination. Bill Wunner stated that this had been observed with certain cell types. It was then stated that to extract those instances from the article to construct a guideline might be useful for indicating where one should be careful.

It was agreed that there is a need to be sure that researchers know how to conduct research at Biosafety Level 2, as well as all other levels, appropriately. It was finally decided that this discussion would be carried forward to the Laboratory Safety Committee for further discussion.

A handwritten signature in black ink, reading "William H. Wunner", with a horizontal line underneath.

William H. Wunner, Ph.D., Chair

WHW/afw



**Institutional Biosafety Committee (IBC) Meeting
Wednesday, March 15, 2006 – 10 a.m.
The Wistar Institute Family Room**

Minutes

Members Present: Cathy Calkens (Community Member), Ronald Collman, Peter Curtis, Paul Lieberman, Robert Rovinsky (Safety Officer), and William Wunner (Chair)

Members Absent: Barry Stein (Community Member), Thanos Halazonetis, Elliot Levine (*Ex Officio*), and Pamela Sankar

OLD BUSINESS:

- A. The June 15, 2005, minutes were approved contingent on a revision to reflect final disposition of protocols that were approved at that meeting.
- B. Report of Recombinant DNA Registration Documents that were reviewed and approved utilizing expedited procedures since the last convened IBC meeting of June 15, 2005, was presented as shown below:

The following new rDNA registration documents were approved by expedited review since the last IBC meeting of 6/15/2005:

IBC #	Last Name	First Name	Study Title	Approval Date
2506256	Huang	Qihong	Introduction of cDNA Library and RNAi Library into Mammalian Cells	6/29/05
2506253	Heber-Katz	Ellen	Reconstitution of Irradiated Mice with Bone Marrow Cells	7/19/05
2506254	Heber-Katz	Ellen	Mammalian Regeneration Genetics	7/19/05
2506257	Dahmane	Nadia	Injection of Transgene (Containing cDNA for ADAMTS1) into Mice	11/2/05
2601258	Jiang	Ping	Generation of Transgenic and Gene Targeted Mice by Pronuclear Injection of DNA and Blastocyst Injection of Gene Targeted Embryonic Stem Cells	1/23/06
2601259	Pure	Ellen	The Role of FAPalpha in Tumor Growth and Metastasis	1/23/06

Amendment Submissions:
None.

THE REPORT OF PROTOCOLS SUBMITTED AND REVIEWED BY EXPEDITED REVIEW SINCE THE 6/15/2005 MEETING WAS APPROVED.



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NEW BUSINESS:

- A. The following Registration Documents were reviewed at the March 15, 2006, IBC meeting and approved contingent on completing the items listed below:

#2603260 entitled "Adenovirus Expressing Fibroblast Growth Factor,"
PI: Ellen Heber-Katz, Ph.D.

Revisions requested:

- #2 – The title of this study is unclear. It should be descriptive but also specific.
- #3B – Describe how recombinant Adenovirus was produced.
- #6B – Include in vitro cells to be used for virus propagation in the lab.

Final disposition:

PI has not responded to request for revisions. Registration document is still on hold.

#2603261 entitled "Identification of miRNAs Involved in Lung Tumor Metastasis,"
PI: Joseph Kissil, Ph.D.

Revisions requested:

- #4 – Describe procedure for cell transduction, even though you are getting these cells from outside.
- #6B – List the in vitro cells you will work with (as this is a cell-based system).
- #7 – Give the percentage of viral genome. "Do not know" is not good enough.
- #8 – Provide a more complete description of the vector. For example, is it a lentivirus?
- 11b – If risk is unknown, what is the basis for selecting Risk Group 1?

Final disposition:

PI provided requested revisions and approval was finalized.

- B. The following registration documents were reviewed at the March 15, 2006, IBC meeting and Tabled because of the need for major revisions as shown below:

#2603262 entitled "Vaccines to Rabies Virus (Adenovirus)," PI: Hildegund Ertl, M.D.

Revisions requested:

- #2 – This is not strictly a rabies study. Expand the title to include vaccines for all agents.
- #3E – Delete "These titers are necessary for replication." Does this study involve vector replication or transduction and expression?
- 6B – State whether or not you are using established cell lines for vector propagation and/or primary cell cultures for expression.
- #8 – What are the vector protein mutations and ITRmu, e.g., a single amino acid change or deletion. How will these mutations affect the adenovirus? Describe their effect on adenovirus.
- #9 – Clarify protein functions. Simply stating "antigen" for example is inadequate.
- #9 – Formation of HSV+ HPV gd E7E6E5 must be defined from a biological perspective. Clarify each biological function, especially how E6E7E5 is derived from HPV. Discuss the potential for oncogenicity. Describe what are full length versus truncated versus fusion proteins.
- #11B – Explain assessment of risks. Provide a thoughtful discussion of the oncogenic potential of E7E6E5.
- #13 – Question must be answered.

Final disposition:

PI provided a revised registration document that was re-reviewed by the IBC via mail. Approval was finalized March 31, 2006.

(Protocols reviewed and tabled at the March 15, 2006 meeting continued)

#2603263 entitled "Vaccines to Rabies Virus (Vaccinia)," PI: Hildegund Ertl, M.D.

Revisions requested:

- #2 – Why is the title "Vaccines to Rabies" when it is "Vaccines to HIV and Influenza"?
- #3B – Define vaccinia strain: include MVA and Copenhagen strains.
- #3C – Answer here is not compatible with the rest of the document. This study involves creating recombinants with various inserts in 2 vaccinia virus vectors. Be more descriptive or provide a table to show combinations.
- #3E – Answer does not make sense. Give dosage for each vector route.
- #8 – Is MVA replication-incompetent? Should MVA be listed as replication-competent? Delete AdC68. Provide the strain for vaccinia.
- #9 – Define biological functions. The answers here for function are not consistently meaningful.
- #11a – Change to BSL2+.
- #11b – Answer the question.
- #13 – Answer the question.

Final disposition:

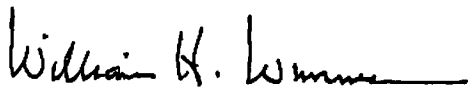
PI provided a revised registration document that was re-reviewed by the IBC via mail. Approval was finalized March 31, 2006.

C. OTHER BUSINESS

Following completion of the review of the registration documents submitted to the March 15, 2006, meeting, some of the IBC members in attendance expressed a concern that the forms were not being completed in a satisfactory manner. It was decided that Dr. Wunner should convey the concerns of the IBC to the research staff. In addition, it was decided that the IBC registration document would be revised in an effort to obtain more thorough and complete answers from the researchers completing them.

Dr. Wunner told the IBC that he would follow through on the above requests. He also informed them that the Institute is working on creating an electronic database that would be used to process the submission and approval of the requests for the use of recombinant DNA in the near future.

Dr. Wunner thanked the IBC for their comments and suggestions. The meeting was adjourned.



William H. Wunner, Ph.D., Chair

WHW/afw



Institutional Biosafety Committee Meeting
Wednesday, November 17, 2004 at 10:30 a.m.
The Wistar Institute Family Room

Minutes

Members Present: Ronald Collman (Community Member), Peter Curtis, Elliot Levine (*Ex Officio*), Paul Lieberman, Robert Rovinsky (Safety Officer), and William Wunner (Chair)

Members Absent: Thanos Halazonetis and Pamela Sankar (Community Member)

- A. Review of July 21, 2004 Minutes
Minutes of the July 21, 2004, IBC Meeting were reviewed and approved as submitted.
- B. Report of Recombinant DNA Registration Documents that were reviewed and approved utilizing expedited procedures since the last convened IBC meeting of 7/21/2004:

New Document Submissions:

Principal Investigator: Ellen Pure, PhD
Registration Document Title: Gene Introduction and Suppression using Lentiviral Vectors
Registration Document #: IBC #2409228

Principal Investigator: Hildegund Ertl, M.D.
Registration Document Title: Use of AAV Vector for Gene Transfer
Registration Document #: IBC #2410229

Amendment Submissions:
None.

Wilson Lab Vector Construct Amendment Submissions:

The following vector constructs were assigned Wistar ID numbers by the IBC Chair, Dr. William Wunner and appended to the documents shown below, since the last convened IBC meeting of 7/21/2004:

Principal Investigator: James Wilson, M.D.
Registration Document Title: Analysis and Evaluation of Adenoviral Vector Systems In Vitro and In Vivo
Registration Document #: IBC #2208176

Wistar ID assignment date: August 12, 2004

Vector Construct	Wistar ID Number
C5/C1.000.CMV.EGFP	W377
C7.000.CMV.empty	W378
H5.040.CMVhLDLR-IRES.CKB	W379



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Wistar ID assignment date: September 7, 2004, 2004

Vector Construct	Wistar ID Number
C6.000CMVempty	W394
C6.010CMVEboZ	W395
C6.000CAG2EboZ	W396
C7.000CAG2EboZ	W397
C9.010CMVA1AT/E3	W398

Wistar ID assignment date: September 17, 2004

Vector Construct	Wistar ID Number
C6.010CMVEGFP	W404
H5.040CAG2nSpike	W405

Wistar ID assignment date: November 4, 2004

Vector Construct	Wistar ID Number
C7.000CMVEmpty	W427
H5.080CMV/MCK.cFIX	W428

Principal Investigator: James Wilson, M.D.
Registration Document Title: Analysis and Evaluation of Adeno-associated Viral Vector (AAV) Systems In Vitro and In Vivo
Registration Document #: IBC #2208177

Wistar ID assignment date: September 9, 2004 (received expedited approval by full IBC)

Vector Construct	Wistar ID Number
AAV2CMVVEGF	W380
AAV2.Z121.rhEpo256	W381
AAV2.CMV.HS3Hnc	W382
AAV2.CMV.TF1NC	W383
AAV2/1.CMV.nLacZ	W384
AAV2/5.CB.LacZ	W385
AAV2/8-TBG-ApoA1	W386
AAV2/8.TBG.ApoA1	W387
AAV2/9.CB.A1AT	W388
AAV2/cy.5CbnLacZ	W389

Wistar ID assignment date: September 17, 2004

Vector Construct	Wistar ID Number
AAV2/7.ds-CB-rhCG-x1	W399
AAV2/7.ss-CB-rhCG-x1	W400
AAV2/8.ds-CB-rhCG-x1	W401
AAV2/8.ss-CB-rhCG-x1	W402
AAV2/8.TBGhLXR	W403

Registration Document #: IBC #2208177 (continued)**Wistar ID assignment date:** October 13, 2004

Vector Construct	Wistar ID Number
AAV2.A1b.a1AT	W408
AAV2/9CMVrhEpo3	W409
AAV2CMVrhEpo3	W410

Wistar ID assignment date: October 26, 2004

Vector Construct	Wistar ID Number
AAV2.AF31-10	W411
AAV2.CMV.HIVgag (short)	W412
AAV2/1.CMV.HIVgag (short)	W413
AAV2/5.CMV.HIVgag (short)	W414
AAV2/6.CMV.HIVgag (short)	W415
AAV2/7.CB.a1AT	W416
AAV2/7.CMV.HIVgag (short)	W417
AAV2/8.CMV.HIVgag (short)	W418
AAV2/9.CMV.HIVgag (short)	W419
AAV8/2CbhA1AT	W420
AAV8/7CbhA1At	W421
AAV8/8CbhA1AT	W422
AAV8/rh.39CbhA1AT	W423
AAVrh.39/2CBA1AT	W424
AAVrh.39/7CBA1AT	W425
AAVrh.39/8CBA1AT	W426

Principal Investigator: James Wilson, M.D.
Registration Document Title: Analysis and Evaluation of Psuedo-Lentiviral Vector Systems
 In Vitro and In Vivo

Registration Document #: IBC #2208178**Wistar ID assignment date:** October 1, 2004

Vector Construct	Wistar ID Number
Spike.HIV.CMV LacZ	W406
Spike.HIV.CMV.LacZ	W407

Report of IBC Expedited Approvals granted since the last convened meeting of July 21, 2004, was approved as submitted.

C. The following Registration Documents were submitted for review and approval at the November 17, 2004, full IBC meeting

1) Amendments:

Principal Investigator:	Wilson, James
Registration Document Title:	Viral Vector Delivery and Gene Therapy/Vaccine Studies in Skeletal Muscle
Registration Document #:	2201142-Amendment PI requests to extend approval of this document to cover animal protocol number 111882, which is the new number of the animal protocol (0936) this rDNA document was originally approved to cover.
IBC Decision/Vote:	<u>This amendment was approved as submitted.</u>

Principal Investigator:	Ertl, Hildegund CJ
Registration Document Title:	Development of Adenoviral Vaccines to HIV-1 with Attention to Various Prime-Boost Strategies Including DNA and Vaccinia Virus as Prime Boosts.
Registration Document #:	2212185-Amendment PI requests to extend approval of this document to cover the use of Vaccinia Virus in an additional animal protocol, number 111880X_0. This document was originally approved to cover the use of Vaccinia Virus in animal protocol #2559,
IBC Decision/Vote:	<u>Rather than amend document #2212185, the Committee granted approval for this registration document to continue 3 additional years under the new recombinant DNA registration document #2411238 which would be used to cover rDNA work in animal protocol #111880X_0. This was done to ensure that the registration document would not expire before the new animal protocol.</u>

Principal Investigator:	Ertl, Hildegund CJ
Registration Document Title:	E1-deleted Adenoviral Vaccines
Registration Document #:	2302187-Amendment PI requests to extend approval of this document to cover the use of Adenovirus C68 in two additional animal protocols, numbers 111879X_0 and 111880X_0. This document was originally approved for the use of Adenovirus C68 in animal protocol #4072.
IBC Decision/Vote:	<u>Rather than amend document #2302187, the Committee granted approval for this registration document to continue 3 additional years under the new recombinant DNA registration document #2411239 which would be used to cover rDNA work in animal protocols #111879X_0 and 111880X_0. This was done to ensure that the registration document would not expire before the new animal protocols.</u>

2) The following registration documents were reviewed and conditionally approved pending changes as shown below:

Principal Investigator: Herlyn, Meenhard
Registration Document Title: Experiments Using Replication-deficient Adeno- and
Lentiviruses in Tissue Culture and Within Mice
Registration Document #: 2411233

Section 9b: PI must provide full name of all gene inserts, identify growth factors, transcription factors, and describe function of each gene insert (general or unknown).

Questions #12 and 13: please answer.

Principal Investigator: Wherry, E. John
Registration Document Title: T-Cell Immunity to Acute and Chronic Infections
Registration Document #: 2411234

Section #3 a) Identify strain of Vaccinia Virus.
b) Identify strain of Influenza Virus. Will the epitope be inserted into the hemagglutinin of flu virus? Would the inserted gene further attenuate the virus.

Section #13. Please complete and submit the attached Research Safety Form.

Principal Investigator: Ertl, Hildegund
Registration Document Title: Immune Responses to AAV Vectors Expressing
Antigens of HIV
Registration Document #: 2411236

Research Category – Change to III-D
Section 10 – Change to Risk Group 2.

Principal Investigator: Ertl, Hildegund
Registration Document Title: Immune Responses to Adenovirus-5 Vectors Expressing
Antigens of Adeno-associated Virus (Capsid Protein)
Registration Document #: 2411237

Research Category – Change to III-D
Section 10 – Change to Risk Group 2.

3) The following registration document was reviewed and approved as submitted:

Principal Investigator: Maley, Carlo
Registration Document Title: Benign Cell Booster and the Sucker's Gambit
Registration Document #: 2411235

D. Other Business**1) Definition of gene inserts and their functions**

Drs. Curtis and Collman stated that there is a need to ensure that abbreviations of gene inserts be spelled out and that their functions are described so that the entire content of the vector construct is known.

2) The Amendment Approval Process

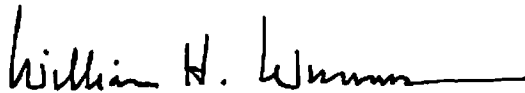
A discussion was held regarding how to handle the need for new rDNA registration document submissions to cover rDNA work in new animal protocols (both of which are approved for a 3-year period) when the PI requests to amend to an older version of a registration document rather submit a new one. It was decided that if the PI needs an approved rDNA registration document to cover a new animal protocol and they have a registration document on file that covers the work in the animal protocol, they will be allowed to re-submit the older rDNA registration document for a new approval.

Amendments will only be approved for the length of the approval period of the rDNA registration document being amended.

3) Transport of Immunocompromised Mice

Dr. Elliot Levine asked the IBC to provide advice regarding the request of Dr. Meenhard Herlyn to transport SCID mice carrying human skin grafts outside of the Institute to the University of Pennsylvania. Dr. Levine stated that there is the concern that the human skin may be HIV-infected, although this is unknown as the skin samples have never been tested. He stated that the animals would not be returned to The Wistar Institute animal facility. Specifically, he asked the IBC's opinion regarding the level of biohazardous risk involved in permitting the transfer of these animals to another institution versus insisting that all work on these animals be done only at The Wistar Institute under isolation in light of the fact that there is a small but finite liability that the Institute will carry.

Although, it was stated that the skin being grafted onto the mice did not contain any type of recombinant viral vectors, the IBC did render an unofficial opinion (based on the expertise of some of the IBC members) that SCID mice would not support the replication of HIV. However, it was further stated that there is the small possibility that the leukocytes within the skin grafted onto the mice may harbor HIV that exist in a latent manner such that it could conceivably be transmissible in some highly convoluted artificial system is possible. However, the risk of this happening naturally because of an escaped mouse during transport was believed to be low. The IBC stated if the risk is assumed by the University of Pennsylvania's IACUC at the time the animals are received and that reasonable safeguards are put in place by Wistar to make sure that the animals are transported in appropriate, low-risk of escape, containers the transport should be fine as long as the University is provided documentation of the nature of the material they are receiving and that it is unscreened for HIV.



William H. Wunner, PhD. Chair

Addendum to November 17, 2004, IBC meeting minutes.

It was requested by Dr. Collman that the rDNA registration document be revised at item #2 to include the word "descriptive" in the request for a title of the study.



Institutional Biosafety Committee Meeting
Wednesday, July 21, 2004 at 10:00 a.m.
The Wistar Institute Family Room

Minutes

Members Present: Peter Curtis, Thanos Halazonetis, Paul Lieberman, Robert Rovinsky (Safety Officer), and William Wunner (Chair)

Members Absent: Ronald Collman, Pamela Sankar and Elliot Levine (*Ex Officio*)

- A. The April 21, 2004, IBC Minutes were reviewed and approved as submitted.
- B. Report of Recombinant DNA Registration Documents that were reviewed and approved utilizing expedited procedures since the last convened IBC meeting of 4/21/2004:

New Document Submissions:

Principal Investigator: Dorothee Herlyn, DVM
Registration Document Title: Expression of GA733 Variants
Registration Document #: IBC #2405220
Review Summary: Approval was granted for this document June 2, 2004.

Principal Investigator: Dorothee Herlyn, DVM
Registration Document Title: Cloning of Colorectal Carcinoma-specific T-Cell Antigens
Registration Document #: IBC #2405221
Review Summary: Approval was granted for this document June 2, 2004.

Principal Investigator: Wolfgang Weninger, PhD
Registration Document Title: Immune Response Against Influenza Virus Proteins
Registration Document #: IBC #2406222
Review Summary: Approval was granted for this document July 1, 2004.

Principal Investigator: Wolfgang Weninger, PhD
Registration Document Title: Role of the CD4 Enhancer in CD4 Gene Expression
Registration Document #: IBC #2406223
Review Summary: Approval was granted for this document July 1, 2004.

Principal Investigator: Dorothee Herlyn, DVM
Registration Document Title: Immunization of Mice with Adenovirus Vector-expressed GA733 Antigen: Survival Study: Immunization of Mice with Adenovirus Vector-expressed mEGP or GA733 Antigen
Registration Document #: IBC #2403215-revised
Review Summary: Approval was granted for this document July 13, 2004



The Wistar Institute is a National Cancer Institute-designated Cancer Center

(Documents approved via expedited procedures since 4/21/2004 continued)

Amendment Submissions to Currently Approved Documents:

Principal Investigator: Ellen Pure, PhD
Registration Document Title: Liver-directed Gene Transfer in Mice Using Replication-incompetent Adenovirus Vectors and Adeno-associated Viral Vectors
Registration Document #: IBC #2401211
Review Summary: PI requested to change animal protocol under which studies described in this document would be performed. A review revealed that the studies were exactly the same as those reviewed and approved by the full IBC on 3/1/2004. Therefore, the IBC Chair, Dr. William Wunner, granted approval for this amendment on 7/1/2004.

Principal Investigator: Kazuko Nishikura, PhD
Registration Document Title: Conditional Expression of ADAR (Adenosine Deaminases Acting on RNA) in HeLa Cells
Registration Document #: IBC #2305197
Review Summary: PI requested to add additional cell lines (HEK293, R1, and Mouse MEF) to be used as host cells for transfection of conditional ADAR expression constructs. A review revealed that addition of these cell lines was in accord with the experiments reviewed by the IBC on May 13, 2003. Therefore, the IBC Chair, Dr. William Wunner, granted approval for this amendment on 7/1/2004.

Vector Construct Amendment Submissions:

Report of vector constructs assigned Wistar ID numbers and appended to the documents shown below by the IBC Chair, Dr. William Wunner, since the last convened IBC meeting of 4/21/2004:

Principal Investigator: James Wilson, M.D.
Registration Document Title: Analysis and Evaluation of Adenoviral Vector Systems In Vitro and In Vivo
Registration Document #: IBC #2208176
Wistar ID assignment date: May 7, 2004.

Vector Construct	Wistar ID Number
C6.000CMV.HIVgag-short(37)	W367
C6.010CMV.HIVRT3	W368
C7.000CMV.HIVgag-short(37)	W369
C7.010.CAG2.nSPIKE	W370
C7.010.CMV.HIVRT3	W371
C7.010.CMV.nSPIKE	W372
H5.000.CMV.HIVgag-short(37)	W373
H5.040CMV.EGFP-UV	W374
H5.040.CMV.HIV RT3	W375

(Vector construct amendments continued)

Principal Investigator: James Wilson, M.D.
 Registration Document Title: Analysis and Evaluation of Adeno-associated Viral Vector (AAV) Systems In Vitro and In Vivo
 Registration Document #: IBC #2208177
 Wistar ID assignment date: May 7, 2004.

Vector Construct	Wistar ID Number
AAV2.CB.CFTR	W350
AAV2.CB.LacZ	W351
AAV2.CB.rhCG	W352
AAV2.dcCB.rhCG	W353
AAV2.TBG.nLacZ	W354
AAV2/1.CB.CFTR	W355
AAV2/1.CB.LacZ	W356
AAV2/5.CB.CFTR	W357
AAV2/5.CMV.nLacZ	W358
AAV2/8.CB.LacZ	W359
AAV2/8.CB.rhCG	W360
AAV2/8.dc CB.rhCG	W361
AAV2/8.TBG.nLacZ	W362
AAV2/9.CB.LacZ	W363
AAV2/9.CMV.LacZ	W364
AAV2/9.CMV.nLacZ	W365
AAV2/rh10.CB.AlkP	W366

Principal Investigator: James Wilson, M.D.
 Registration Document Title: Analysis and Evaluation of Psuedo-Lentiviral Vector Systems In Vitro and In Vivo
 Registration Document #: IBC #2208178
 Wistar ID assignment date: May 7, 2004.

Vector Construct	Wistar ID Number
CVS-GP.HIV.LacZ	W376

Report of IBC review and approval activity conducted since the last convened IBC meeting of April 21, 2004, was approved as submitted.

C. The following new registration document was reviewed and approved pending the changes listed below::

Principal Investigator: Wolfgang Weninger, PhD
Registration Document Title: Immune Responses Against Tumors
Registration Document #: IBC #2407224

PI must define the term "L1" in section 9b.

The following new registration documents were reviewed and approved as submitted:

Principal Investigator: Hildegund CJ Ertl
Registration Document Title: Vaccines to Rabies Virus (pcDNA, pSG5, pVR)
Registration Document #: IBC #2407225

Principal Investigator: Hildegund CJ Ertl
Registration Document Title: Vaccines to Rabies Virus (Vaccinia Virus)
Registration Document #: IBC #2407226

Principal Investigator: Hildegund CJ Ertl
Registration Document Title: Vaccines to Rabies Virus (Adenovirus)
Registration Document #: IBC #2407227

E. Other Business

The BUA


There was a discussion of the status of development of the Wistar Biological Use Authorization (BUA) database. A sample document (as noted below), was submitted by Dr. Paul Lieberman:

Principal Investigator: Paul Lieberman, PhD
Biological agents: rDNA, Infectious Agents/toxins, human materials
BUA #: BUA319_2004

Following a lengthy discussion of how the document was used by Dr. Lieberman, how the research staff might want to use it, and how it would serve the purposes of the Committee in regards to the review and approval of the use of infectious agents, it was decided that rather than developing an agent driven database, a project driven database might be more efficient. Dr. Wunner said that he would meet with the Information Systems Department to discuss revising the aims of the BUA's development based on the discussion held at the meeting.

F. Other Business

There was no other business.



William H. Wunner, PhD
Chair, Wistar IBC

WHW/afw