

Biological Safety Administrative Advisory Committee
University of California, Davis
Office of Environmental Health and Safety
October 17, 2005
106 Hoagland Hall

Start Time: 3:00 PM

In attendance:

Nick Lerche	Voting Member, Chair, Primate Center
Stephen Judd	Voting Member, Public Member
William Jewell	Voting Member, Molecular Structure Facility
Mike O'Malley	Ex-Officio Member, Employee Health Services
Lon Kendall	Voting Member, Director: CLAS
Deborah Kimbrell	Voting Member, Molecular & Cellular Biology
Bryce Falk	Voting Member, Plant Pathology
Michelle Bell	Biosafety Program Coordinator, Environmental Health and Safety
Carl Foreman	Voting Member, Environmental Health and Safety
Sean Barry	Voting Member, Campus Biosafety Officer

Excused:

Judith Kjelstrom	Voting Member, Vice Chair, Microbiology Biotechnology Program
Jodi Casselman	Voting Member, Public Member

Absent:

Sandy Kelley	Voting Member, Contained Research Facility
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Guests:

Jeff Ching

I. Approval of September 19, 2005 Minutes

Approved as submitted

II. Old Business

A. BUA's

1. Completed New:

BUA No. **0738**

Title: Molecular mechanisms of Salmonella Pathogenesis

CONDITIONAL with changes to:

- * Provide more information on infected animal handling and waste handling
- * Document that 70% ethanol is an effective decontaminant for *Salmonella*
- * Are you following surface bleach treatment with 70% ethanol spray, or is the ethanol spray an alternative to surface bleach treatment? The ethanol spray by itself is not considered an effective surface decontaminant--please clarify its use or remove it from the project summary (OK to use after bleach)

BUA No. **0658**

Title: Murine Viral Antigens

APPROVED

2. Completed Renewals:

BUA No. **None**

Title:

3. **Completed Amendments:**

BUA No. **None**
Title:

4. **BSL 1 Renewal Notifications:**

BUA No. **None**
Title:

5. **Resubmitted**

BUA No. **0751** **Harper, Richard**

Title: Duox2 regulation of viral infection

APPROVED, but PI should add a statement about terminal inactivation

III. New Business

A. BUA's

1. **New:**

BUA No. **0755**

Title: Friedrich's ataxia, mitochondria and cell death

CONDITIONAL with changes to:

- * Delete 70% ethanol for terminal inactivation or provide documentation that it is effective for HeLa cells
- * Alternatively, substitute 30 minute exposure to 10% final concentration household bleach for 70% etha

BUA No. **0756**

Engbrecht, JoAnne

Title: Cell Signaling in Meiosis

CONDITIONAL with changes to:

Page 5: Check "NO" box stating "This protocol will be submitted to NIH for Human Gene Transfer Proposal approval"
" Spell out "PLD" and "PA"

BUA No. **0757**

Title: Role of sand fly salivary protein maxadilan in pathogenesis of *Leishmania chagasi*

TABLED

Page 8: Rewrite project summary and address all of the the bulleted points in the instructions

- * Add discussion of vector containment and worker protection for infected sandflies
- * Detail PPE for research staff working with infected hamsters
- * Add discussion of lab hygiene -- surface decontamination, waste collection and treatment, etc.
- * Add discussion of lab exposure potential (at least twelve lab infections by *Leishmania* have been reported)
- * Contact Employee Health Services to formulate a staff health surveillance program and include in the revised BUA

2. **Renewal**

BUA No. **0322**

Yilma, Tilahun

Title: Increased safety and efficacy of recombinant vaccines and diagnostic kits

CONDITIONAL with changes to:

- * Change "10% sodium hypochlorite solution" to 10% household bleach
- * Document effectiveness of Lysol for surface decontamination against these agents
- * Specify consistently which genes are being cloned and which cloning system is being used (genes specified in the project summary were different from genes specified in the agents table, and the no discussion of the cloning system)

3. Amended

BUA No. **0565**

Title: Immunopathogenesis of anaplasma phagocytophila

TABLED with changes :

- * Clarify experimental program with the agent. Detail the background, the source of the agent, personal protection, decontamination, terminal inactivation, etc.
- * Resubmit on regular BUA form as a new BUA, with a complete project summary

BUA No. **0554**

Title: Ecology, Vector Competence, Surveillance and Control of Arbovirus

****Removed from agenda pending completion**

IV. Assurance Statements:

1. A.J. Fisher X-ray Structure Determination of Biologically Important Protein
2. C.H. Warden Identification of Genes Causing Obesity or Diabetes In Response to Variations In The Amount and Type of Fat.
3. J.M. Nunnari Molecular Mechanisms of Mitochondrial Fission
4. M.E. Etzler Mechanism of Plant Perception of Oligosaccharide Signals
5. C.W. Schmid Human Alu Repeats: Germ-Line Methylation and Heat Shock Response
6. J.E. Natzle Experimental Manipulation of Ecdysteroid Levels During Insect Development

The reason for the Assurance Statements was explained to the committee.

V. Discussion Items

1. BSAAC clarification: are investigators who work with exempt quantities of Select Agent toxins required to have a BUA?
Policy clarification: *No, a BUA is not required but we will develop a notification system, possibly through DaFIS*
2. Do we require a BUA for work with primary human and primate cell lines?
Policy clarification: *No, we do not.*

VI. Information Items

1. Michele Igo The Role of the Bacterial Cell Surface in the Virulence of *Xylella fastidiosa* - Exempt from NIH
Acknowledged

To be discussed as time permits

**** July Provisionals**

BUA No. **0322**

Yilma, Tilahun

Title: Increased safety and efficacy of recombinant vaccines and diagnostic kits

Approved by BSAAC Chair 07/21/05

BUA No. **0347**

Title: Animal Model Studies with Infectious Agents

Approved by BSAAC Chair 07/21/05

BUA No. **0383-01**

Title: Molecular characterization and development of improved prophylactic and diagnostic reagents for control of viral infections of horses and ruminants

Approved by BSAAC Chair 07/21/05

BUA No. **0528-B**

Title: Growth Factors to Reverse Cognitive Decline in Aging

Approved by BSAAC Chair 07/21/05

BSAAC

Minutes FNA 0554

Title: Ecology, Vector Competence, Surveillance and Control of Arboviruses
Approved by BSAAC Chair 07/21/05

BUA No. **0682** **Schwartzkroin, Philip A.**
Title: Viral Transfection to Treat Epileptic Activity
Approved by BSAAC Chair 07/21/05

BUA No. **0683**
Title: Infectious Diseases of Dogs and Cats
Approved by BSAAC Chair 07/21/05

BUA No. **0684**
Title: Biochemical adaptation of mammals and fish to environmental stress
Approved by BSAAC Chair 07/21/05

**** August Provisionals**

BUA No. **0606**
Title: Vitamin Status Assessment in Human Blood
Project Termination & acknowledged by BSAAC Chair 08/16/05

BUA No. **0642**
Title: Gene Therapy and Cell-Based Therapy for Liver Diseases
Edits (per BSAAC 06/13/05) made & acknowledged by BSAAC Chair 08/16/05

BUA No. **0749**
Title: Biosynthesis of 14C-Vitamin B12 by Salmonella enterica serova Typhimurium
Approved w/Edits per BSAAC Chair 08/16/05

It was decided that all above Provisionally Approved BUAs would be considered Conditionally approved pending comments from campus veterinarian.

Adjourned: 4:30 PM

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Biological Safety Administrative Advisory Committee
University of California, Davis
Office of Environmental Health and Safety
November 21, 2005
106 Hoagland Hall

Start Time: 3:00 P.M.

In attendance:

Nick Lerche	Voting Member, Chair, Primate Center
Judith Kjelstrom	Voting Member, Vice Chair, Microbiology/Biotechnology Program
Jodi Casselman	Voting Member, Office of the Vice Chancellor for Research
Lon Kendall	Voting Member, Center for Lab Animal Science
Bryce Falk	Voting Member, Plant Pathology
Sandy Kelley	Voting Member, Contained Research Facility
Lisa Strelow	Voting Member, Center for Comparative Medicine
Carl Foreman	Voting Member, Director, Environmental Health and Safety
Sean Barry	Voting Member, BioSafety Officer, Environmental Health and Safety
Gil Garcia	Prin. Technician, Environmental Health and Safety

Excused:

Stephen Judd	Voting Member, Public Member
Deborah Kimbrell	Voting Member, Molecular & Cellular Biology
William Jewell	Voting Member, Molecular Structure Facility
Mike O'Malley	Ex-Officio Member, Employee Health Services
Michelle Bell	BioSafety Program Coordinator, Environmental Health and Safety

Guests:

Art Perez	Department Safety Advisor, Environmental Health and Safety
Jeff Ching	Department Safety Advisor, Environmental Health and Safety
Karen Villanueva	Dr. Borowsky's lab
Shirley Luckhart	Medical Microbiology and Immunology
Kathy Blaisdell	Medical Microbiology and Immunology

I. Introduction of Dr. Lisa Strelow as a member of the BSAAC

II. Approval of October 17, 2005 Minutes

Approved as submitted

III. Old Business

A. BUA's

1. Completed New:

BUA No. **0751** **Harper, Richart**

Title: Duox2 Regulation of Viral Infection

FINAL APPROVAL

BUA No. **0753**

Title: Development of Cancer-Specific Adenovirus

FINAL APPROVAL

BUA No. **0754**

Title: Inhibition of the Alzheimer's Beta-Amyloid Oligomer Formation

FINAL APPROVAL

2. Completed Renewals:

BUA No. **0546** **Cliver, Dean O.**
Title: Foodborne and Waterborne Pathogens
FINAL APPROVAL

BUA No. **0641** **Suslow, Trevor**
Title: Microbial Study of Foodborne Pathogens on Produce
FINAL APPROVAL

3. Completed Amendments:

BUA No. **None**
Title:

4. BSL 1 Notifications:

BUA No. **None**
Title:

5. Resubmitted

BUA No. **0565** [REDACTED]
Title: Mouse Model and Immunopathogenesis of Anaplasma Phagocytophilum
FINAL APPROVAL

IV. New Business

A. BUA's

1. New:

BUA No. **0711** **Beckles, Diane M.**
Title: Transformation of Arabidopsis with a wheat starch synthase gene
APPROVED

BUA No. **0758** **Widdicombe, Jonathan**
Title: Effects of Rhinovirus on Airway Epithelium
TABLED for changes:

1. The protocol should include more detail about specific processes, e.g...:
 - a. How is the virus denatured ("...done under conditions where the virus is denatured") - do that the virus is denatured by the assay or prior to it?
 - b. Either omit or elaborate on phrases and qualifiers such as "set periods of time: and "are all determined by"
2. What is the source of the human mucosal cells (primary culture, commercial source, stock, etc)?
3. The human cells should be included in the list of potentially infectious agents as a BSL-2 agent?
4. What is the nexus between the BUA and Human Subjects (IRB)?

BUA No. **0759** [REDACTED]
Title: RNA Interference

CONDITIONAL APPROVAL with edits to:

1. Specify the source and the primary reference for the lentivirus vectors
2. Specify the source(s) of the various cells used in your work
3. Clarify the "BSL3 practices" that you will be using
4. Specify 30 minute contact time for 10% bleach decontamination
5. Indicate where the mouse treatments (inoculations) will occur (CLAS facilities or the lab?)
6. Specify the type of package that you will use to contain the viral vectors outside of the containment cabinet
7. Review the project summaries carefully to detect and fix typographical/spelling errors

2. **Renewal**

BUA No. **0236** **Harada, John**
Title: Developmental Regulation of Plant Genes
APPROVED

BUA No. **0376** **Lagarias, J. Clark**
Title: Recombinant DNA Protocols: Phytochrome Analyses
APPROVED

BUA No. **0393** [REDACTED]
Title: Leptospira Vaccine Development

TABLED for changes:

1. Clarify the type of training PI and Polli Ward are scheduled to receive or have already received (on 12/20/2005 and 11/17/2005)
2. Clarify the meaning of the sentence in your project summary: "Any bacteria, recombinant virus other viruses and animal carcasses used in the above projects are transported in rigid, tightly sealed containers. No agents other than *Leptospira interrogans* were listed in your protocol, so this sentence caused the Committee some concern. Please discuss only the agents to be used in your work, and please be specific about them.
3. The health surveillance checklist on page 10 was checked ambiguously - some were checked "no" and some "N/A". The proposed work suggests that all should be checked "N/A".
4. The Committee noted one or two typographical or spelling errors and a mis-checked box (p. 5, "sources")

BUA No. **0639** [REDACTED]
Title: Bacterial Pathogens: Interactions with the Host and Environmental Survival
TABLED with query:

- 1 Clarify "exempt status" of Yersinia strain (PGM-) *
 - 2 Identify UCD locations where animals are treated (inoculated)
 - 3 Confirm that personnel will be wearing gloves and PPE during all phases of the work including handling and animal care
- * *CDC website confirmed exempt status of Dr. Young's Yersinia strain. Therefore, BSO reclassified protocol to Conditional Approval pending response to items 2 & 3 above.*

CONDITIONAL APPROVAL

BUA No. **0676** [REDACTED]
Title: Therapeutic Agents for Mannheimia Haemolytica Infections of Ruminants
APPROVED

BUA No. **0686** [REDACTED]
Title: Adeno-associated Viral Angiostatin Vector in a Murine Glioma Model
APPROVED

BUA No. **0691** **Boundy-Mills, Kyria**
Title: Phaff Yeast Culture Collection
TABLED for changes:

1. Submit a complete inventory of the live collection
2. Include information on the methods used to maintain living cultures; specifically, are you passing

BSAAC the cultures, and if so, how are they being handled from a Biosafety standpoint?

Minutes - FINAL Identify the BSL2 species and strains

4. Identify other individuals who maintain the collection, and include them in the roster of authors
5. Specify methods of transportation for cultures sent and received
6. Identify the faculty member responsible for the collection, and include that person in the roster of authors

BUA No. 0692

Hwang, Daniel H.

Title:

**Dr. Hwang's protocol was submitted for provisional approval to the BSAAC Chair
PROVISIONAL APPROVAL**

BUA No. 0694

Title: Use of recombinant DNA in the Animal Biotechnology and Genomics Laboratory
APPROVED

BUA No. 0690

Title: The Virulence Plasmids of *Clostridium perfringens*

TABLED for changes:

- 1 Detail information on agent origins, transportation, lab and animal care employee health survey
- 2 Specify methods to determine that total toxin in possession does not exceed exempt limits.
- 3 Attach CAHFS Health and Safety Protocol to revised BUA

3. Amended

BUA No. 0731

Title: Mosquito immunity to *Plasmodium* infection

APPROVED

4. Termed

BUA No. 0703

Carlos, Maria

Title: Inactivation of HIV in Breastmilk by Heat Treatment

APPROVED

V. Assurance Statements:

- 1 W. Pittroff Prescribed Herbivory in Vegetation Management
- 2 S.P. Lawler Effects of Introduced Fish on Native Biodiversity and Ecosystem Subsidy
- 3 J. Dubcovsky Wheat Applied Genomics
- 4 Pamela Ronald Isolation of Pathogen Associate Molecules that Trigger Rice XA21-Mediated Defense Response
- 5 Pamela Ronald Elucidating the NRR/NH1 Mediated Resistance Signaling Network
- 6 J. Harada Control of Cellular Processes During Embryogenesis in Higher Plants

VI. Discussion Items

1. Reschedule January and February 2006 BSAAC meetings due to holidays
BSO's office will communicate new dates by e-mail

VII. Information Items

1. SOP of ABSL2 & ABSL3
Tabled until December meeting
2. Policy Statement: Retaining / destroying BUA hardcopies
BSO advised that BUAs are to be left with the Biosafety Program Coordinator for shredding.

Meeting was adjourned at 4:40 PM

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Minutes - FINAL

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Biological Safety Administrative Advisory Committee
University of California, Davis
Office of Environmental Health and Safety
December 19, 2005
106 Hoagland Hall

Start Time: 3:00 PM

In attendance:

Nick Lerche	Voting Member, Chair, Primate Center
Judith Kjelstrom	Voting Member, Vice Chair, Microbiology/Biotechnology Program
Jodi Casselman	Voting Member, Office of the Vice Chancellor for Research
Lisa Strelow	Voting Member, Center for Comparative Medicine
Deborah Kimbrell	Voting Member, Molecular & Cellular Biology
William Jewell	Voting Member, Molecular Structure Facility
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Carl Foreman	Voting Member, Director, Environmental Health and Safety
Sean Barry	Voting Member, BioSafety Officer, Environmental Health and Safety
Gil Garcia	Prin. Technician, Environmental Health and Safety
Michelle Bell	BioSafety Program Coordinator, Environmental Health and Safety

Excused:

Lon Kendall	Voting Member, Center for Lab Animal Science
Sandy Kelley	Voting Member, Contained Research Facility
Stephen Judd	Voting Member, Public Member
Bryce Falk	Voting Member, Plant Pathology

Guests:

Christine Judal	Department Safety Advisor, Environmental Health and Safety
Jeff Ching	Department Safety Advisor, Environmental Health and Safety
Dan Dana	Department Safety Advisor, Environmental Health and Safety
Tian Xue	Cell Biology and Human Anatomy
Suk Ying Tsang	Cell Biology and Human Anatomy

I. Approval of November 21, 2005 Minutes

II. Introduction of Dr. Bette Hinton of Yolo County Public Health as upcoming public member (will start in Jan

III. Old Business

A. BUA's

- 1. Completed New:**
BUA No. **None**
Title:
- 2. Completed Renewals:**
BUA No. **None**
Title:
- 3. Completed Amendments:**
BUA No. **None**
Title:
- 4. BSL 1 Notifications:**
BUA No. **None**
Title:

5. **Resubmitted**

BUA No. **0393** **Lefebvre, Rance**

Title: Leptospira vaccine development

TABLED with following requested changes:

- * Clarify whether animals are used in the project. If animals are being used, reference the [
- * Correct spelling error

BUA No. **0690** [REDACTED]

Title: The virulence plasmids of *Clostridium perfringens*

CONDITIONAL for following edits:

- * Specify how the epsilon toxin is inactivated

BUA No. **0757** [REDACTED]

Title: Role of sand fly salivary protein maxadilan in pathogenesis of *Leishmania chagasi*

APPROVED

BUA No. **0758** **Widdicombe, Jonathan**

Title: Effects of rhinovirus on airway epithelium

CONDITIONAL for following edits:

- * What is SDS and paraformaldehyde concentration and exposure time for viral inactivation
- * Note: Remain current on Bloodborne pathogen training
(Tissue source is high risk for Hepatitis B and HIV)

1V. **New Business**

A. **BUA's**

1. **New:**

BUA No. **0760** [REDACTED]

Title: Somatic gene transfer of ion channels

CONDITIONAL for following edits:

- * Identify lentiviral and adenoviral vectors
- * Delete references to exposure time for cabinet surface decontamination ("for at least one h
- * Delete "do not carry or express any viral genes" (this is incorrect)
- * Identify cDNA as mouse origin
- * Provide literature reference for lentivirus

2. **Renewal**

BUA No. **0553** [REDACTED]

Title: Molecular pathogenesis studies and DNA vaccine development for FIV and SIV infection

CONDITIONAL for following edits:

- * What is being used to disinfect centrifuge vessels
- * Specify PPE to be used while working with *Vaccinia*
- * Specify disinfectant being used to decontaminate biosafety cabinet interior
- * Paraformaldehyde concentrations were inconsistent
- * Clarify the source of herpes cytomegalovirus plasmids (human, cat, primate?)

BUA No. **0555** **Sun, Gang**

Title: Antimicrobial textile

CONDITIONAL for following edits:

- * Specify bleach contact time and final concentration
- * Correct typographical error
- * Clarify "UCD Microbiology Lab" source of *S.aureus* (clinical isolates not allowed)

BUA No. **0692** **Hwang, Daniel H.**
Title: Suppressed cell proliferation and differential gene expression by n-3 fatty acids
Committee review postponed until January

BUA No. **0744** [REDACTED]
Title: Investigation of respiratory outbreaks in horses
PI temporarily withdrew BUA

3. Amended

BUA No. **0347** [REDACTED]
Title: Animal model studies with infectious agents
APPROVED

V. Notifications:

A. BSL-1 Exempts

1. BUA No. **0210** **Meares, Claude F.**
Title: Creation of novel antibody derived fusion proteins for cancer treatments
APPROVED
2. BUA No. **0761** **Wood, Matthew**
Title: Perception of environmental toxicants
APPROVED

B. Termed or Expired

1. BUA No. **0217** **Dahmus, Michael**
Title: Structure and function of mammalian RNA polymerase II
APPROVED
2. BUA No. **0489** [REDACTED]
Title: Biology of rodent borne zoonoses in northern California; reservoir host competence of rolyme disease spirochete
APPROVED

C. Reviewed by BSO for final approval

1. BUA No. **0322** **Yilma, Tilahun**
Title: Increased safety and efficacy of recombinant vaccines and diagnostic kits
APPROVED
2. BUA No. **0759** [REDACTED]
Title: RNA interference
APPROVED

VI. Assurance Statements:

1. Dvorak, Jan Isolation of the wheat *Phl* locus suppressor *Sul-Phl*
2. Dubcovsky, Jorge Characterization of the gene network that regulates vernalization in whea
3. Beckles, Diane Regulatory networks controlling the transcription of rice start ciosynthe
4. Rice, R.H. Protein components of cross-linked structures of the integument

VII. Discussion Items

~~BSAC~~ Biosafety Program Coordinator to send out consensus to members for rescheduling February 2006 BSAAO
Minutes - FINAL
12/19/05

VII. Information Items

1. SOP of ABSL2 & ABSL3 discussed
2. Members to leave BUA copies with Biosafety Program Coordinator to be shredded
3. Possibility of increasing Public Membership to three also discussed

Meeting was adjourned at 4:50 PM

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Minutes - FINAL
12/19/05