



April 10, 2006

the sunshine project
P.O. Box 41987
Austin, TX 78704

Dear Mr. Hammond
Director

Per your request I am sending you the minutes of the meetings of the Montana State University Institutional Biosafety Committee, since May 1 2003.

By definition of the roles and responsibilities for the Montana State University IBC has implemented written policies for the identification, review and oversight of research which may potentially involve any of the seven categories of experiments of concern identified by the National Academies of Science in its report "Biotechnology Research in an Age of Terrorism".

Sincerely,

Jo-An Lindstrom
Biosafety Officer

**Department of
Microbiology**

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**Minutes
Institutional Biosafety Committee
May 21, 2003**

Tom Blake
Cliff Bond
Jack Frost
Jo-An Lindstrom
Jeff Littlefield
Jack Riesselman
Tim Roark
Jean Starkey
Steve Shaneyfelt

1. Review of Projects:
 - a. #277 Overcoming the limitations of mycohebicides for control of weeds
 - b. #278 The role of MgATP in nitrogen catalysis
 - c. #279 Assessing the long-term microbial safety of ultraviolet light disinfection point of use/entry treatment devices
 - d. #280 Phagocyte contact response in aspergillosis immunity
 - e. #281 Canola seeding date and rate and weed control studies
 - f. #282 The identification of protein lubricators, supporting flagellum-independent surface migration of *Vibrio cholera*
 - g. #283 Functional genomics in clinically relevant biofilms
 - h. #284 Use of RNAi to inhibit CaM kinase in vivo
 - i. #285 Weed control in Roundup Ready spring wheat

All projects were approved.

2. The renewal of the Select Agent Registration was submitted to the CDC. At this point we are waiting for a response.

Minutes
Institutional Biosafety Committee
August 7, 2003

Tom Blake
Cliff Bond
Jack Frost
Jo-An Lindstrom
Jeff Littlefield
Jack Riesselman
Tim Roark
Jean Starkey
Steve Shaneyfelt

1. Review of Projects:
 - a. #286 Effects of Bayer proprietary biocide on Mycobacterium immunogens
 - b. #287 Detection of bioterrorism agents in drinking water
 - c. #288 Immune system stimulation through non-antibiotic means
 - d. #289 Heme acquisition on group A streptococcus
 - e. #290 Systematic identification of antigens and virulence factors of horse pathogen Streptococcus equi
 - f. #291 Renewable and recyclable lubricants from vegetable lipids, A novel method of reducing air, soil, and water pollution from internal combustion engines and vehicles
 - g. #292 Microbial community structures and controls on mercury speciation and transport in YNP
 - h. #293 Antimicrobial test methodology – statistical support
 - i. #294 Imaging studies to test the efficacy of targeted multi-photon photodynamic therapy for the treatment of cancerous tumors
 - j. #295 Feeding of barley beta-glucans to stimulate the immune system of food-producing animals as an alternative to antibiotic use
 - k. #296 Enzymatic carboxylation and chiral chemistry
 - l. #297 Novel microbial enzymatic CO₂ fixation/carboxylation reactions

All projects were approved.

2. We are still waiting for approval of our Select Agent Registration from CDC.
3. We completed a search for the Biosafety Officer and Responsible Official. Jo-An Lindstrom was the strongest candidate and will assume to position on August 15.

9/25/03

Institutional Biosafety Committee

Members: Dr. Cliff Bond, Microbiology
 Dr. Jack Frost, Animal Resource Center
 Ms. Jo-An Lindstrom, Biosafety Officer
 Dr. Jeff Littlefield, Entomology
 Dr. Jack Riesselman, Plant Sciences and Plant Pathology
 Mr. Tim Roark, Community
 Dr. Jean Starkey, Microbiology
 Dr. Steve Shaneyfelt, M.D.

The Projects numbered 298-304 were reviewed and approved by the committee.

Projects #303 and #304 were reviewed and approved by IACUC. There was some discussion concerning the biohazard precautions and SOP's that need to be in place before work may begin. The Biosafety Officer will follow up on these concerns.

There were no other comments at this time.

1/12/04

Institutional Biosafety Committee

Members: Dr. Cliff Bond, Microbiology
 Dr. Jack Frost, Animal Resource Center
 Ms. Jo-An Lindstrom, Biosafety Officer
 Dr. Jeff Littlefield, Entomology
 Mr. Tim Roark, Community Health Department
 Dr. Jean Starkey, Microbiology

The Projects numbered 305-309 were reviewed and approved by the committee.

Project # 305, the disposal of animals and bedding and any other safety issues regarding deactivation of prions will be addressed with the P.I. and the Biosafety Officer. A Member requested a sign-off sheet for disinfection to be dated and initialed. The project will be using the Animal Resource Center, room 152.

Project #306, a Member requested a better description of "DNA samples".

Project # 308, will be using room 151 in the Animal Resource Center in accordance with ABSL2 procedures.

A new Director of the Animal Resource Center will be named by July 1, 2004. It is expected this individual will be asked to sit on the Biosafety Committee.

There were no other comments at this time.



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**Minutes
Institutional Biosafety Committee
April 26, 2004**

Attendees: Tom Blake
Cliff Bond
Jack Frost
Jeff Littlefield
Tim Rourke, Community member
Jean Starkey
Mark Quinn
Jo-An Lindstrom
Tim Ford

Meeting was called to order at 1:10p.m.

Old Business

1. Upcoming considerations for IBC membership – new members, Chair, length of appointments.
 - a. Dr. Cliff Bond made the request to step down as Chairperson for the Committee. Mark Quinn made a motion to nominate Jo-An Lindstrom appointed as the new Chairperson. Cliff Bond and Jack Frost seconded the motion. Dr. Bond will send a letter to the V.P. for Research, Tom McCoy.
 - b. The possible new members recommended were Sandra Holonen, Jim Burritt, both from Microbiology and Benfang Lei, from VMB, all qualified in infectious diseases. The Biosafety Officer will follow-up with the nominations.
 - c. A length of time for appointment of each member was not determined.
2. Update of CDC inspections and Select Agent Registration application.
 - a. The inspection report has not been received at this time. The status of the S.A. application is unchanged.

New Business

1. Review of Projects:
 - a. #310 "New interventions and verification for the control of pathogens in the processing of jerky" – Boles
Motion to approve, Mark Quinn, seconded, Cliff Bond
 - b. #311 "Feeding Barley Beta-glucans to Stimulate the Immune System" – Kaiser
Motion to deny due to lack of experience, Tim Rourke, seconded, Jean Starkey. It was recommended the project be resubmitted with either Jim Wiley or Allen Harmsen as PI and Ms. Kaiser as co-investigator.
 - c. #312 "Control of Biofilms on Central Venous Catheters by Natural Products" – Costerton
Motion to approve with the stipulation to change the PI, Cliff Bond, seconded, Jack Frost.
 - d. #313 "Regulation of Gene Expression in Group A Streptococcus" – Lei
Motion to approve, Mark Quinn, seconded, Cliff Bond.
 - e. #314 "Proteomics of Mouse Tissue Resistant and Susceptible to Trypanosome Infection" – Dratz
Motion to deny due to incomplete information. Which trypanosome species is used? Resubmit the project with Martin Teintze as PI and Ed Dratz as co-investigator. Specify qualifications of who will actually do the work. USDA inspection to follow.
 - f. #315 "Bio-Inspired Nanomaterials: Protein Cage nano-Architectures" – Douglas
Motion to approve, Mark Quinn, seconded, Cliff Bond.
2. Richard Bessen project update, all laboratory and handling of waste issues have been resolved.
3. Project renewal timeline, 3 years, 5 years, Mark Quinn suggested 5 years which is also standard for Human Subject Committee projects.

Function of the Biosafety Committee, the NIH guidelines were provided to members by request.

The Occupational Health Program was discussed, a letter will be sent to V.P. for Research. The Project forms will be amended to include more information on the projects and the experience, background, qualifications of the P.I. to do the project.

The meeting was adjourned at 1:10p.m.

**MSU Minutes
Institutional Biosafety Committee
August 5, 2004**

Attendees: Ken Conger, Community Member
Jack Frost
Sandra Halonen
Jeff Littlefield
Stephanie Nelson for Tim Rourke, Community member
Jack Riesellman
Jean Starkey
Mark Quinn
Jo-An Lindstrom

Meeting was called to order at 12:05p.m.

Old Business

1. Approval of Biosafety Committee Minutes, April 26, 2004.

New Business

1. Review of Projects:
 - a. #316 "Enzymatic production of high-grade motor oil using common vegetable oils(s)" – Sands
Approved for lab study only due to funding
 - b. #317 "Project 1 of PPG: Optical voltage probes" – Hughes
Approved
 - c. #318 "Molecular Bonding of Biologically Active Compounds to Implantable Medical Devices" – Goeres
Approved
 - d. #319 "IFN inhibition of *Toxoplasma gondii* in astrocytes" – Halonen
Approved
 - e. #320 "Role of the LAT-ICP0 locus in regulating herpes simplex virus (HSV-1) latency" – Halford
Approved, recommendation to contact Occupational Health Officer re: titers
 - f. #321 "The Role of Biofilms in the Pathogenesis of Otorrhea" – Veeh
Denied, need more information. Suggested a representative from CBE attend next meeting to clarify projects.
 - g. #322 & 323 "Susceptibility to *Streptococcus pneumoniae* infection after influenza infection" – Harmsen
Approved

2. Review of new project review and renewal forms
The recommendation from the Committee is to include on the form a line PI can show experience of lab personnel. Also, if possible to have on-line submittals for review and renewal.
3. The status if the Occupational Health Officer position was discussed. As of this date no appointment has been made. The Biosafety Officer continues to assist with issues when called.

The meeting was adjourned at 1:10p.m.

Meeting minutes were taken by Jo-An Lindstrom



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**Minutes
Institutional Biosafety Committee
January 13, 2005**

Members Present: Dr. Ken Conger, Physician, Community Member
Dr. Cliff Bond, Microbiology
Dr. Christine O'Rourke, Animal Resource Center
Dr. Jeff Littlefield Entomolgy
Dr. Tim Roark, Co. Health Dept., Community member
Dr. Jean Starkey, Microbiology
Dr. Mark Quinn, Veterinary Molecular Biology
Ms. Jo-An Lindstrom, Chairman
Ms. Linda Leotterle, Guest Speaker

The Meeting was called to order at 12:15p.m.

Old Business

1. Approval of August 5, 2004 Biosafety Committee meeting minutes.
2. Introduction of a new member, Dr. Christine O'Rourke.

New Business

1. Review of Projects:
 - a. #325 "DNA Vaccines for Q Fever"– Pascual
 - b. #326 "Mucosal Vaccines for Plague"– PascualBoth Projects were approved. PI will be supplied with the *Coxiella burnetti* DNA from Dr. Minick of the University of Montana. The Q-fever information needed, if live organisms are used, investigate the possibility of offering the vaccine. BSL-3 practice should be followed.
- c. #327 "Evaluating and Applying Quantitative Real-time PCR to Describe the Population Dynamics of Fusarium Crown Rot Species on Wheat"- Alan Dyer
Approved; PI should follow BSL-2 practices.
- d. #328 " Quantitative Investigation of Calicivirus Capsid Dynamics"
– Bothner
Approved, Biosafety Officer will contact PI for the source of the virus.

- e. #329 "Factors Associated with Hantavirus Transmission" - Hardy
 - f. #330 "Murine Norovirus Protein Interactions" – Hardy
- Both Projects were approved. Dr. Bond provided information about Hantavirus transmission.

2. Select Agent update of new projects for Harmsen, Jutila and Pascual with *Coxiella burnetti*.

There is not enough information to evaluate these Projects at this time.

3. Center for Biofilm Engineering overview by Linda Leotterle.
Ms. Leotterle presented the process used at the Center for Biofilm Engineering to oversee their Projects. She had samples of the forms used and training manual.

4. Occupational Health Position update.
Ms. Lori Buchar has been hired to the Occupational Health Position at Safety and Risk Management. She will be invited to attend the Biosafety Committee Meetings as an ad hoc member.

5. Request from VP Research Office.
The Chair of the Biosafety Committee will submit the Minutes of meetings to the V.P. for Research Office as requested for records retention policies. In addition, a motion was made, and approved, to request additional funding for the Biosafety Program in order to maintain biosafety cabinet certifications and keep pace with the growing requirements to support Research PIs.

The meeting was adjourned at 1:30 p.m.

Meeting minutes were taken by Jo-An Lindstrom

Minutes
Institutional Biosafety Committee
April 27, 2005

Members Present: Dr. Ken Conger, Physician, Community Member
Dr. Cliff Bond, Microbiology
Dr. Christine O'Rourke, Animal Resource Center
Dr. Jeff Littlefield Entomology
Dr. Tim Roark, Co. Health Dept., Community member
Dr. Jean Starkey, Microbiology
Dr. Mark Quinn, Veterinary Molecular Biology
Ms. Jo-An Lindstrom, Chairman

The Meeting was called to order at 12:15p.m.

Old Business

1. Approval of January 13, 2005 Biosafety Committee meeting minutes.

New Business

1. Review of Projects:
 - a. #331 "Microbial fuel cells, sewage bacteria"-Lewandowski
 - b. #332 "Microbial fuel cells, *Shewanella sp.*"-Lewandowski
 - c. #333 "Biofilm Efficacy Study" - Goeres
 - d. #334 "Contributions of Protocadherins to Neurulation -Rashid
 - e. #335 "Trivalent Vaccine Development via Salmonella Vector" - Yang
 - f. #336 "Project 1 Gene Expression and Manipulation of *C. burnetii*" - Minnick
 - g. #337 "Project 3 Cellular and Humoral Host Immune response to *Coxiella burnetii*"- Harmsen
 - h. #338 "Project 3 Enhancement of innate immunity against Coxiella pneumonia" - Quinn
 - i. #339 "Project 4 DNA Vaccines for Q Fever - Pascual
 - j. #340 "Project 2 Enhancement of innate immunity against Coxiella pneumonia" - Jutila
 - k. #341 "Response to dual infection in the lungs: - Wiley

All of the projects were approved. Projects #337 and #339 were approved with the caveat work will begin when facility remodel is adequate for ABSL3 requirements.

2. The ARC will not be remodeled for an ABSL3 suite.

The meeting was adjourned at 1:50 p.m.

Meeting minutes were taken by Jo-An Lindstrom

Minutes
Institutional Biosafety Committee
August 19, 2005

Members Present: Dr. Cliff Bond, Microbiology
Dr. Jeff Littlefield Entomolgy
Dr. Tim Roark, Co. Health Dept., Community member
Dr. Jean Starkey, Microbiology
Dr. Mark Quinn, Veterinary Molecular Biology
Ms. Jo-An Lindstrom, Chairman

The Meeting was called to order at 12:10p.m.

Old Business

1. The April 27, 2005 Biosafety Committee meeting minutes were approved.

New Business

1. Review of Projects:
 - a. #343 "Targeting Biofilms for Chronic Wound Treatment" Garth James
 - b. #344 "Regulation of neural crest migration by cadherin-mediated cell adhesion" Roger Bradley
 - c. #345 "Ecology of Diarrheal Disease-Associated bacteria found in the Ganges River in India" Tim Ford
 - d. #346 "Analysis and Rational Modulation of superoxide Production by Human Phagocyte Cyt b" Ross Taylor
 - e. #347 "Effects of Turbulence, UV Light and Organic Material on the Toxicity of Piscicides" Alexander Zale
 - f. #348 "Macrophage cytokine profile array analysis induced by recombinant Salmonella" Yang Xinghong
 - g. #349 "Brucella abortus virulence gene selection from phoP mutant microarray" Yang Xinghong
 - h. #350 "Analysis of gamma delta T cell" Mark Jutila

All of the projects were approved.

2. Occupational Health Program update: Jean Starkey reported the meeting with SRM regarding exposure to biological hazards was being followed up in a reasonable manner. Perhaps some reporting of incidence to IBC should be required.
3. A suggestion was made for renewal of projects every 5 years and to include a signature line to show experience of personnel working with organisms, etc.
4. The new requirement for emergency drills with use of select agents was discussed. A recommendation was made to include the County Health Department. The Biosafety Officer will make that contact.

The meeting was adjourned at 1:05 p.m.

**Minutes
Institutional Biosafety Committee
November 30, 2005**

Members Present: Dr. Cliff Bond, Microbiology
Dr. Sandra Halonen, Microbiology
Dr. Christine O'Rourke, Animal Resource Center
Dr. Jeff Littlefield, Entomolgy
Dr. Tim Roark, Co. Health Dept., Community member
Dr. Jean Starkey, Microbiology
Dr. Mark Quinn, Veterinary Molecular Biology
Ms. Jo-An Lindstrom, Chairman

Guests: Ms. Sandra Sward, OSP
Ms. Linda Loetterle, CBE

The Meeting was called to order at 12:10p.m.

Old Business

1. The August 19, 2005 Biosafety Committee meeting minutes were approved.

New Business

1. Review of Projects:
 - a. #351 "Prion and influenza coinfection pilot study"
Richard Bessen
 - b. #352 "Biogeochemical cycling of heavy metal in Lake Coeur d'Alene sediments: The role of indigenous microbial communities" Brent Peyton
 - c. #353 "DNA Vaccines against Legionnaires' Disease"
David Pascual
 - d. #354 "Astrobiology Biogeocatalysis Research Center"
John Peters
 - e. #356 "Noninvasive Diagnosis and Treatment of Lung Cancer using Two-Photon Photodynamic Therapy"
Jean Starkey
 - f. #357 "Commercialization of Genetically Modified Peppermint for Production in the United States"
Duane Johnson
 - g. #358 "Molecular basis for cell tropism in *Toxoplasma*" Jay Radke

Project #351 was tabled until a complete project form is submitted. Additional project submission is needed on work with scrapie from sheep tissue. The other projects were approved.

2. The Occupation Health Program will issue laminated cards to be used in emergency situations when suspected exposure to biological pathogens.
3. The Biosafety Officer met with the Gallatin Valley Unified Command Committee to discuss required emergency drills. Follow-up on drill parameters to continue.

4. A revised IBC form was submitted for comment. The electronic proposal clearance forms were discussed.

The meeting was adjourned at 12:55 p.m.

Meeting minutes were taken by Jo-An Lindstrom

Minutes
MSU Institutional Biosafety Committee
March 8, 2006

Members Present: Dr. Cliff Bond, Microbiology
Dr. Sandra Halonen, Microbiology
Dr. Ken Conger, Community Member
Dr. Jeff Littlefield, Entomology
Dr. Mark Quinn, Veterinary Molecular Biology
Dr. John Sherwood, Plant Sciences, Plant Pathology
Ms. Jo-An Lindstrom, Chairman

Guests: Ms. Sandra Sward, OSP
Ms. Linda Loetterle, CBE
Ms. Laurie Bachar, SRM
Dr. Andres Fischer, PSPP

The Meeting was called to order at 12:05p.m.

Old Business

1. The November 30, 2005 Biosafety Committee meeting minutes were approved.

New Business

1. Review of Projects:
 - a. #359 "None: Scrapie Project" Richard Bessen
This project was approved pending safety training and medical surveillance screening. The issue of proper disposal of prion material, clarification of the species source, and shipping/receiving training was discussed.
 - b. #360 "Disruption of endocrine homeostasis during prion disease" John Bailey
This project was approved.
 - c. #361 "High-throughput screen for genes in castor that enhance ricinoleate accumulation in seed oils of transgenic Arabidopsis" Chaofu Lu
This project was approved.
 - d. #362 "Molecular genetics of plant light responses and reproductive development"
Robert Sharrock
This project was approved.
 - e. #363 "Proteomic analysis of signaling network changes in human epilepsy"
Edward Dratz
This project was approved pending clarification of personnel doing the work, and dangerous goods shipping/receiving training.

2. New member
Introduction of Dr. John Sherwood, replacing Dr. Tom Blake
3. Select Agent Mandatory Drill Meeting
A review of the January Select Agent Emergency drill was given. Some of the security questions have been resolved. Another amendment has been submitted.
4. Cryptosporidium infection at VMB animal unit
While installing a shower room at the Clinic, five Facilities Service employees became ill. Two were confirmed Cryptosporidium infection. A meeting and review of procedures was scheduled.
5. New member recommendation
Dr. Jack Riesselman will be retired in June. A recommendation was made to appoint Dr. Andreas Fischer as his replacement.

The meeting was adjourned at 1:05pm.