

Institutional Biosafety Committee

9/5/2025, 12:00PM – 1:00PM

Teleconference

Minutes

Voting Members Present: Brian Taylor, Karen Scanlon, Alan Schmaljohn, Ron McNeil, Elizabeth Bramhall, J. Kristie Johnson, John O'Neill, Irina Luzina, Janna Barcelo, Matthew Frieman, Robert Ernst, Ciaran Skerry, Alfredo Garzino-Demo, Matthew Fischer

Voting Members Absent: Ami A. Patel, Marianne Cloeren, Melissa Morland, Anthony Kim, Theresa Marth, Joseph Gillespie, Sammy Almashat, Sherry Bohn, Jessie Duggan

Other Person(s) Present: No other persons were present at the meeting.

Staff Present: Matthew Fischer, John O'Neill, Holda Ramos

1 Vote on Last Meeting's Minutes

Institutional Biosafety Committee meeting on 8/1/2025

Votes to approve minutes: 14, Disapprove: 0, Abstain: 0

2 New Business

This meeting of the IBC is open to the public pursuant to the NIH Guidelines, Section IV-B-2-a-(6).

- SciShield IBC migration:
 - New protocols will move to SciShield soon.
 - We are creating SciShield accounts for IBC members now. If you don't have an institutional, umaryland email address, watch for notice.
 - We will start messaging ASAP.
- A replacement US Government policy for Dual Use Research of Concern (or "Dangerous Gain of Function") is expected any day. As of now, a meeting of the DURC IRE will be held on Friday, October 3rd.
- Our next meeting is scheduled for Friday, October 3rd.
- Member issues
 - EHS has hired a new laboratory inspector.
 - ChABSA has a dinner meeting on September 9th about the affect of risk assessment on containment laboratory facility design.

3 Reportable Incidents

- No reportable events occurred this month.

4 New IBC Submissions

Short Title: Sex differences in osteoarthritis pain model

Investigator: Joyce Teixeira da Silva
ID: IBC-00008443
Analyst: Holda Ramos
VA-Related: No
Discussion: This protocol involves the use of AAV in animals. This work is classified by the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules as III-D-4-a using BSL-1 facilities and ABSL-1 practices. The following modifications are required to secure approval: 1) Update IACUC information and 2) List equivalent names of the AAV genes of interest used.
Motion: RMSA
Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Therapeutic applications of focused ultrasound
Investigator: Pavlos Anastasiadis
ID: IBC-00008237
Analyst: John O'Neill
VA-Related: No
Discussion: This protocol involves the use of a sindbis viral vector in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-1-a using BSL-2/ABSL-2 facilities and practices. The following modifications are required to secure approval: 1) Correct the typo in the title; 2) Remove extraneous details from the Scientific Abstract; 3) Clarify in the experimental design what is happening in this laboratory versus that of the collaborator; 4) Clarify the funding source; 5) Correct the risk groups of the host and vector; 6) Add a pathogenicity statement for sindbis virus; and 7) Explicitly list all PPE to be used.
Motion: RMSA
Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Gut Microbiome in Immune Tolerance
Investigator: Mustafa Ozcam
ID: IBC-00008456
Analyst: John O'Neill
VA-Related: No
Discussion: This protocol involves the use of plasmids in K12 *E. coli* and *Limosilactobacillus reuteri*, which will be used in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-4-a using BSL-1/ABSL-1 facilities and practices. The following modifications are required to secure approval: 1) Provide more detail under procedures to be performed and qualifications and training of Principal Investigator; 2) Elaborate on the animal portion of the study and how it relates to the overexpression of the gene of interest in *L. reuteri*; 3) Acknowledge that replication competent *L. reuteri* may be transmitted horizontally; and 4) Add a statement for the collection and disposal of animal bedding when working at UMB.

Motion: RMSA
Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Understanding the molecular mechanisms driving pulmonary fibrosis
Investigator: Konstantin Tsoyi
ID: IBC-00008472
Analyst: John O'Neill
VA-Related: No
Discussion: This protocol involves the use of lentiviral vectors in murine and human cells. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-1-a using BSL-2 facilities and practices with sharps precautions. The following modifications are required to secure approval: 1) Remove extraneous chemical procedures from the abstract; 2) Define disinfection method; and 3) Add sharps precautions related to work with lentiviral vectors.

Motion: RMSA
Vote: For: 14, Against: 0, Abstained: 0, Recused 0

Short Title: Develop a DNA based vaccine for Mycobacterium marinum in fish
Investigator: Nili Zmora
ID: IBC-00008482
Analyst: John O'Neill
VA-Related: No
Discussion: This protocol involves the use of plasmids in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-4-a using ABSL-1 facilities and practices. The following modifications are required to secure approval: 1) Correct the typo in the title; 2) Add the IACUC Principal Investigator to this IBC protocol; and 3) Describe the precautions used to prevent accidental needlesticks when injecting fish.

Motion: RMSA
Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

5 Modification Discussions

Short Title: Determine the efficacy of morpholino oligonucleotides in a rodent models of myotonic dystrophy
Investigator: Joseph P Stains
ID: IBC-00006467
Analyst: John O'Neill
VA-Related: No
Discussion: This modification involves the use of AAV in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-4-a using ABSL-1 facilities and practices. This modification also involves the use of morpholinos and mRNA in animals. This work is classified by the NIH Guidelines for Research with

Recombinant or Synthetic Nucleic Acids as III-F-1 using ABSL-1 facilities and practices.
The following modifications are required to secure approval: 1) Update personnel and 2)
Remove expired animal-use documents.

Motion: RMSA

Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Fetal Gene Delivery Using Low-Intensity Focused Ultrasound

Investigator: Whitney Parker

ID: IBC-00007792

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification involves the addition of plasmids and CRISPR technology in animals.
This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic
Nucleic Acids as III-D-4-a using ABSL-1 facilities and practices. The following modification
is required to secure approval: Update personnel.

Motion: RMSA

Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Protein-Protein Interactions in Striated Muscle

Investigator: Robert Bloch

ID: IBC-00000754

Analyst: John O'Neill

VA-Related: No

Discussion: This modification involves the use of plasmids in K12 *E. coli*, mammalian cells, and
animals. This work is classified by the NIH Guidelines for Research with Recombinant or
Synthetic Nucleic Acids as III-F-8, Appendix C2 for work with *E. coli* and is approved using
BSL-1 facilities and practices, III-F-8, Appendix C1 for work with mammalian cells and is
approved using BSL-2 facilities and practices, and III-D-4-a for work with animals and is
approved using ABSL-2 facilities and practices.

Motion: Approve the Modification

Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

Short Title: Vascular signaling plasticity

Investigator: Thomas Longden

ID: IBC-00006386

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification involves the use of AAV in animals. This work is classified by the NIH
Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-4-a and is
approved using ABSL-1 facilities and practices.

Motion: Approve the Modification

Vote: For: 14, Against: 0, Abstained: 0, Recused: 0

6 **RMSA Follow Up**

Short Title: Screening of BSL2 viruses with anti-viral compounds
Investigator: Matthew Frieman
ID: IBC-00002948
Analyst: John O'Neill
VA-Related: No
Discussion: This modification involves the addition of two recombinant influenza strains used in mammalian cells. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-7 and is approved using BSL-2 facilities and practices. The following modifications were made to secure approval: 1) Clarified that the newly added influenza strains will not be used in animals and 2) Corrected the units of concentration in Risk Assessment page 1, Question 5.
Status: Approved

Short Title: Pathogenesis of Muscular Dystrophies
Investigator: Robert Bloch
ID: IBC-00000188
Analyst: Holda Ramos
VA-Related: No
Discussion: This modification involves updating the use of Lentivirus from 3rd to 2nd generation and new genes of interest, and additional AAV constructs. This work is classified by the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules as III-D-1-a and is approved using BSL-1 and ABSL-1 facilities with and practices. The following modifications were made to secure approval: 1) Indicated that vectors are less than two-thirds of any viral genome and 2) Removed superfluous information.
Status: Approved

Short Title: Virotherapy for vaccine and oncology applications
Investigator: Bolni Nagalo
ID: IBC-00008432
Analyst: John O'Neill
VA-Related: No
Discussion: This protocol involves the use of vesicular stomatitis virus and derived vectors, lentiviral vectors, and adenoviral vectors in mammalian cells and animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-1-a and is approved using BSL-2/ABSL-2 facilities and practices with sharps precautions. This protocol also involves the use of AAV in murine cells which will be engrafted in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-4-a and is approved using BSL-1/ABSL-1 facilities and practices. The following modifications were made to secure approval: 1) Reworked the abstracts for ease of future modifications; 2) Reconciled the personnel lists between the

IBC protocol and the animal-use protocol; 3) Added detail in the experimental design for the purpose of vaccinia virus; 4) Reworked the experimental design for ease of future modifications; 5) Added the animal-use protocol number; 6) Added all laboratory locations; 7) Added an entry on the Recombinant DNA Questions page for vaccinia virus since it is recombinant; 8) Corrected the NIH Guideline for replication-competent viruses to III-D-3a; and 9) Included plan for poxvirus vaccination of personnel.

Status: Approved

Short Title: Lipid A modification of Gram-negative bacteria

Investigator: Robert Ernst

ID: IBC-00000053

Analyst: John O'Neill

VA-Related: No

Discussion: This modification involves the use of a *P. aeruginosa* mutant strain in animals. This work is classified by the NIH Guidelines for Research with Recombinant or Synthetic Nucleic Acids as III-D-2-a and is approved using BSL-2/ABSL-2 facilities and practices. The following modifications were made to secure approval: 1) Filled in omitted answers in the recombinant DNA table and 2) Updated the name of University of Maryland Campus Health.

Status: Approved

7 Non-Exempt Protocols with Periodic Reviews

Short Title: IBC: MUSIC-HFrEF1

Investigator: Mohammad Sadegh Asadi

ID: IBC-00007388

Analyst: John O'Neill

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Long-term Inhibition of HIV transcription by targeting cellular CDK9 *in vivo*

Investigator: Alonso Heredia

ID: IBC-00003501

Analyst: Holda Ramos

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Obscurin Signaling through RhoA in Skeletal Muscle

Investigator: Robert Bloch

ID: IBC-00000177

Analyst: Holda Ramos

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Injection of human myogenic cell line into mice
Investigator: Robert Bloch
ID: IBC-00002077
Analyst: Holda Ramos
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Generation of OBSCN-deficient breath epithelia to prime vascular smooth muscle cell pre-metastatic microenvironment formation.
Investigator: Aikaterini Kontrogianni-Konstantopoulos
ID: IBC-00006607
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Obscurin Signaling through RhoA in Skeletal Muscle
Investigator: Robert Bloch
ID: IBC-00000177
Analyst: Holda Ramos
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Cancer and Angiogenesis in Mice
Investigator: Toni Antalis
ID: IBC-00002240
Analyst: John O'Neill
VA-Related: No
Discussion: There have been substantive changes to this protocol submission.

Short Title: Role of mesenchymal stem cells in neural injury and pain control
Investigator: Ke Ren
ID: IBC-00000390
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Early life responses to infection
Investigator: Karen Scanlon
ID: IBC-00006741
Analyst: John O'Neill
VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Evaluating a blue crab antimicrobial peptide activity

Investigator: Jum Sook Chung

ID: IBC-00006764

Analyst: John O'Neill

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Identification of growth deficiency in Osteogenesis Imperfecta

Investigator: Satoru Otsuru

ID: IBC-00004520

Analyst: John O'Neill

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Barrier Dysfunction in Severe Surgical Diseases

Investigator: Douglas J. Turner

ID: IBC-00000344

Analyst: John O'Neill

VA-Related: Yes

Discussion: There have been substantive changes to this protocol submission.

Short Title: IBC: 2487GCCC: Anitocabtagene Autoleucel vs. Standard of Care Therapy in Participants With Relapsed/Refractory MM

Investigator: Mehmet Kocoglu

ID: IBC-00008056

Analyst: John O'Neill

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: Regeneration and tracking of specific cells and tissues by bone marrow transplantation in mice

Investigator: Li Zhang

ID: IBC-00000474

Analyst: John O'Neill

VA-Related: No

Discussion: There have been no substantive changes to this protocol submission.

Short Title: LDL receptor family members and their role in Atherosclerosis and Vascular Biology

Investigator: Dudley Strickland

ID: IBC-00004501

Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: *In vitro* gene deletion using adenoviral vectors
Investigator: Ryan Riddle
ID: IBC-00006677
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC: 2005GCCC: A PHASE 2, OPEN-LABEL, TRIAL OF JCAR017 IN R/R INDOLENT B-CELL NON-HODGKIN LYMPHOMA (NHL)
Investigator: Aaron Rapoport
ID: IBC-00005480
Analyst: Holda Ramos
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC: 1818GCCC: Study of Axicabtagene Ciloleucel vs Soc in R/R DLBCL (ZUMA-7)
Investigator: Aaron Rapoport
ID: IBC-00004485
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Role of modulators of Pi/PPi in cementum formation and regeneration
Investigator: Emily Chu
ID: IBC-00006511
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Roles of circHIPK3 and HuR in aging gut barrier function
Investigator: Lan Xiao
ID: IBC-00007920
Analyst: John O'Neill
VA-Related: Yes
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC: CORE 2
Investigator: Anuj Gupta

ID: IBC-00007687
Analyst: John O'Neill
VA-Related: No
Discussion: There have been substantive changes to this protocol submission.

Short Title: Tissue regeneration and cell signaling in muskeloskeletal system
Investigator: Jie Jiang
ID: IBC-00004800
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC: 2290GCCC: Dose-escalation, Dose-expansion Study of Safety of PBCAR0191 in Patients With r/r NHL and r/r B-cell ALL
Investigator: Jean Yared
ID: IBC-00007149
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Transgenic mice for research of maternal diabetes-induced birth defects
Investigator: Peixin Yang
ID: IBC-00006928
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC: Age de-escalation safety trial of PfSPZ-LARC2 Vaccine in Burkina Faso (HP-00107768)
Investigator: Matthew Laurens
ID: IBC-00007529
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Roles of androgen receptor and sex specific transcription factors in cannabinoid and opioid receptor regulation
Investigator: Jin Ro
ID: IBC-00002474
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: HIV immunopathogenesis
Investigator: Alfredo Garzino-Demo
ID: IBC-00005264
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Reprogramming stem cells for muscle repair
Investigator: Shaojun Du
ID: IBC-00001891
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Molecular Studies on HIV-associated B cell lymphoma in a transgenic mouse model
Investigator: Alfredo Garzino-Demo
ID: IBC-00002534
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Genome Engineering Core
Investigator: Rena Lapidus
ID: IBC-00004427
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Testing and Application of Novel Probiotic Bacteria for use in Marine Aquaculture
Investigator: Harold Schreier
ID: IBC-00003522
Analyst: John O'Neill
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: IBC Submission: 2318GCCC: Ph I of P-MUC1C-ALLO1 in Pts w/ Adv./m Solid Tumors
Investigator: Arif Hussain
ID: IBC-00007325
Analyst: Holda Ramos
VA-Related: No
Discussion: There have been no substantive changes to this protocol submission.

Short Title: Automated Stem Cell Radiolabeling via 3D Microprinting-Enabled Microfluidics
Investigator: Mirosław Janowski
ID: IBC-00005346
Analyst: Holda Ramos
VA-Related: Yes
Discussion: This modification has been administratively approved for changes in personnel.

Short Title: Immunopathogenesis of Infectious Diseases
Investigator: Joao Pedra
ID: IBC-00002247
Analyst: Holda Ramos
VA-Related: No
Discussion: This modification has been administratively approved for changes in personnel.

Short Title: Interrogating the roles of sarcomeric proteins Obscurin and Myosin-Binding Protein C, slow skeletal isoform in cardiac and skeletal myopathies
Investigator: Aikaterini Kontrogianni-Konstantopoulos
ID: IBC-00007262
Analyst: Holda Ramos
VA-Related: No
Discussion: This modification has been administratively approved for changes in personnel.

Short Title: Cytoskeletal proteins in striated muscle pathophysiology
Investigator: Aikaterini Kontrogianni-Konstantopoulos
ID: IBC-00000466
Analyst: Holda Ramos
VA-Related: No
Discussion: This modification has been administratively approved for changes in personnel.

Short Title: Long-term Inhibition of HIV transcription by targeting cellular CDK9 *in vivo*
Investigator: Alonso Heredia
ID: IBC-00003501
Analyst: Holda Ramos
VA-Related: No
Discussion: This protocol has been administratively approved for updates to experimental design.

Short Title: Engineering adenoviral vectors as vaccines for infectious disease
Investigator: Lynda Coughlan
ID: IBC-00005922
Analyst: John O'Neill
VA-Related: No

Discussion: This modification has been administratively approved for the addition of swine influenza, changes in personnel, and additional procedures.

Short Title: Immunopathogenesis of Infectious Diseases

Investigator: Joao Pedra

ID: IBC-00002247

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification has been administratively approved for changes in personnel and addition of a biosafety cabinet.

Short Title: *F. tularensis* LVS pathogenesis

Investigator: Eileen M. Barry

ID: IBC-00001075

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification has been administratively approved for updates on the biosafety cabinets certification date.

Short Title: Cytoskeletal proteins in striated muscle pathophysiology

Investigator: Aikaterini Kontrogianni-Konstantopoulos

ID: IBC-00001018

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification has been administratively approved for changes in personnel.

Short Title: Periodontal Disease Pathogenesis and Periodontal Tissue Development/Regeneration

Investigator: Vivek Thumbigere Math

ID: IBC-00004488

Analyst: Holda Ramos

VA-Related: No

Discussion: This modification has been administratively approved for work with non-recombinant *F. nucleatum*, *S. sanguinis*, *S. gordonii*, *S. mutans*, *L. johnsonii*, and *E. coli* *in vitro* and *in vivo* using BSL-2/ABSL-2 facilities and practices