Institutional Biosafety Committee

Date | time 7/17/2025 10:00 AM | *Meeting called to order by:*

Dr. Andrew Hayhurst

Meeting adjourned at 10.33 AM

In Attendance by ZOOM

Member	Expertise	Present (Yes [Y]/ No[N])
Andrew Hayhurst, Ph.D.	Protein engineering, display systems, BoNT, BSL-2, 4 (chair)	Y
Tim Anderson, Ph.D.	Pathogen evolution, malaria & schistosome drug resistances	Y
Hsiang Ming (Anthony) Wang, Ph.D.	Director EHS, RO, alternate BSO, BSL-2, 3, 4	Y
Marie-Claire Gauduin, Ph.D.	Recombinant virus vectors, NHP, HIV vaccines, retroviruses, BSL-2, 3	N
Trent Peacock, Ph.D.	BSO, ARO, molecular diagnostics, BSL-2, 3, 4 (vice-chair)	Y
Yan Xiang, Ph.D.	Mechanisms of poxvirus pathogenesis, (community member)	N
Felicia Ponce	IACUC Manager	Y
Olena Shtanko, Ph.D.	Molecular virology, viral entry, pathogenesis, BSL-2, 3, 4	N
Davida Smyth, Ph.D.	Microbial epidemiology & genomics, (community member)	Y
Luis Martinez Sobdrido, Ph.D.	Viral reverse genetics, attenuated vaccines, antivirals, BSL-2, 3, 4	Y
Diako Ebrahimi, Ph.D.	Viral evolution, HIV, statistical biology	N
Olga Gonzalez, D.V.M.	Veterinary pathology at ABSL-2, 3, 4, infectious/natural diseases and aging of NHP	N
Jack Dutton, D.V.M.	Veterinarian, ABSL-2, 3, 4, animal models of infectious disease, countermeasure assessment	Y
Kathy Brasky, V.M.D.	Primary veterinarian, ABSL-2, 3, 4, animal models of infectious disease, countermeasure assessment, diverse NHP biology	Y
Jason Bowling, M.D.	Human infectious disease medicine, epidemiology, infection prevention	Y
John Choe, M.D.	Occupational health	N

Also attending: Erica Arreola and Winka Le Clec'h – recording the Institutional minutes

Quorum: was present 10/16 = 62.5 %

Approval of Minutes: Minutes from RDC/BSC June 2025 approved.

Update on previous business: All revisions required from last meeting were made and approved apart from IBC25-011 Smriti Mehra – proprietary discrete multiwalled carbon nanotube HIV therapy which was withdrawn.

Discussion: Institutional Biosafety Committee (IB) scientific specialties were filled and reported to the NIH via the IBC-RMS. Texas Biomed IBC intranet page has been updated to reflect change from BSC-RDC to IBC in addition to applicable policies.

New Applications & Amendments for Review:

Request was made to members to self-identify if conflicts of interest arise and recuse as necessary.

BSCRDC22-014.7 & 23-009.7 Larry Schlesinger – Addition of *M. tuberculosis* CDC1551 mutant strains

Lay description, provided by PI: Acquire less virulent *Mycobacterium tuberculosis* (*Mtb*) cell wall mutants and investigate their basic physiology and associated immune responses.

Agent characteristics: *Mycobacterium tuberculosis* CDC1551 and two recombinant derivatives.

Types of manipulations planned: Infect human or murine primary cells, clones, or cell lines and monitor immune responses, bacterial growth, cell viability, cytokine production, and signaling pathways.

Sources of nucleic acids: *Mycobacterium tuberculosis* CDC1551 and two recombinant derivatives: *Mtb*ΔCapA: LAM with no caps; *Mtb*ΔCapA: Phospho-Inositol (PI)-LAM.

Nature of sequences: Recombinant *Mtb* strains were selected using antibiotics (kanamycin and apramycin). None of these antibiotics are front line anti-*Mtb* drugs. Mutants were developed and provided by an external collaborator. *Mtb*ΔCapA (kanamycin resistant): Makes LAM devoid of any form of caps. *Mtb*ΔCapA (kanamycin and apramycin resistant): Makes PILAM (LAM harboring phospho-inositol caps instead of mannoside caps).
Hosts and vectors to be used: *Mtb* CDC1551 is the host for the mutations; human and murine primary cells, clones or cell lines are used to host the mutated *Mtb* bacteria.

Foreign gene(s) expressed: Antibiotic resistance, PILAM.

PI and lab staff trained: PI and staff are well trained, with extensive experience in BSL-3 *Mtb* research. Planned work aligns with the parent application, and follows established protocols for inactivation, disinfection, monitoring and incident response.

Facilities and containment: BSL-3.

Applicable section of guidelines: Experiments using RG3 agents as host vector systems: III-D-1-b.

The following will require clarification: None.

Motion: **Approval** | **10 Approve, 0 Against, 0 Abstain**

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IBC25-012 Colwyn Headley – Advancing immune restoration in aging via targeted mitochondrial delivery

No recombinant/synthetic nucleic acids involved -

Lay description, provided by PI: This study uses antibody-tagged mitochondria (MitoTags) to test whether replacing damaged mitochondria with healthy ones can restore tissue health, reduce inflammation, and enhance immune function in older Marmosets.

Agent characteristics: Antibody-tagged mitochondria from Marmoset.

Types of manipulations planned: Antibody-tagged mitochondria will be delivered to older marmosets.

Nature of sequences: NA

Hosts to be used: Marmosets.

Foreign gene(s) expressed: NA

PI and lab staff trained: Not described.

Facilities and containment: ABSL-2.

Applicable section of guidelines: Not described.

The following will require clarification: Include the project location in the application. Explain how mitochondrial transfer effects will be measured in marmoset recipients. Clarify control animal treatments, the source of mito-tagged mitochondria and maternal genetic match, sterility handling, and potential for graft rejection. State biohazardous waste disposal procedures and define project success metrics. TP comments and edits on the protocol will be shared with the PI.

Motion: **Approval pending clarifications** | **9 Approve, 0 Against, 1 Abstain as COI.**

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Meeting adjourned at 10.33AM

Next IBC meeting:

8/21/2025 10:00 AM, Zoom