The Buck Institute for Research on Aging

Institutional Biosafety Committee
Friday November 7, 2025
1:00-3:00pm
Zoom

Meeting Minutes

Voting Members Present:	Chris Endicott, PhD (Chair, BSO, Chemistry) Birgit Schilling, PhD (Chemistry) Kai Zhou, PhD (Molecular and Cell Biology) Myriam Chuquin (Grants Director) Gary Scott, PhD (Molecular Biology)
Voting Members Absent:	Meredith Protas, PhD (Genetics, Non-Affiliated Member) Marilyn Dobbas, (RN-retired, Non-Affiliated Member)
Other Attendees:	Cary McDonald (Animal Care & Use Program Director)

1. Call to Order
    a. A quorum was confirmed and the meeting came to order at 1:05pm.

2. Review of Minutes from 7/31/25 IBC Meeting
    a. Prior meeting minutes were reviewed and unanimously approved via email on 8/19/25 due to new posting requirements.

    b. No additional edits were brought forward.

3. IBC Committee Membership Changes
    a. The Buck Institute executive team decided to change some committee memberships in order to better diversify faculty service. As a result, Dr. Hansen stepped down and Dr. Zhou joined the IBC.

    b. Cary McDonald was invited to this meeting to provide expertise for mouse and rat research. The IBC voted unanimously to expand our committee to include an animal expert which will be filled by the animal care and use program director. Other senior vivarium staff or IACUC administrative members could also serve in this role in the future should the animal care and use program director be unavailable.

    c. The IBC Chair will update the committee roster on the NIH website.

4. Review of Items from Previous IBC Meeting
    a. The IBC Chair has been working with the Buck Institute IT dept and Cayuse support to resolve an issue with personnel information updates during the BUA amendment process. Currently, changes to personnel information cannot be saved.

    b. The IBC Chair has been working with CITI to provide additional training for IBC members. This training will be disseminated to each IBC member once it is available.

c. BUA#: B1037
Title: Chronic Inflammation and Non-Communicable Disease
PI: David Furman
Type: Addendum
Reviewers: Full Committee
NIH Guideline Sections: Not Applicable
Status: Approved, 10/16/2025

This BUA addendum was reviewed at the 7/31/2025 IBC meeting. Minor issues including a missing signature were corrected. An application to use these iPSC-derived organoids was also submitted to and approved by the Buck Institute SCRO committee on 10/16/2025. This BUA addendum was approved for BSL2 research.

d. BUA#: IBC-00000028
Title: Mitochondria and Bioenergetics in Aging and Aging-Related Diseases
PI: Akos Gerencser
Type: New Application
Reviewers: Full Committee
NIH Guideline Sections: III-D-1, III-D-2, III-E-1, III-F-1, III-F-2, III-F-3, III-F-4, App C-I, App C-II
Status: Unfinished

This BUA application was reviewed at the 7/31/2025 IBC meeting. Revisions for final approval (add Buck Institute core funding, include an experimental description and SDS for each listed toxin, and update chemical inventory with specific room numbers) have not been completed yet. The IBC Chair will reach out to Dr. Gerencser to complete the BUA process as soon as possible.

e. BUA#: IBC-00000029
Title: Neurological Diseases, Triplet Repeat Diseases and Aging
PI: Lisa Ellerby
Type: 3-year Renewal
Reviewers: Full Committee
NIH Guideline Sections: III-D-4-a, App C-II, App C-III, App C-VII, App C-VIII
Status: Approved, 10/6/2025

This BUA 3-year renewal was reviewed at the 7/31/2025 IBC meeting. Revisions for final approval included updating source of transgenic mice, checking appropriate boxes in Breeding Tg Animals section, updating source and replication competence for AAV and lentivirus, updating exposure routes for virus work, specifying rooms for all toxins, completing personnel experience for all researchers, and fixing various minor typos in Toxins Additional Detail and Methodology sections. These revisions were completed and this BUA was approved for BSL2 research.

f. BUA#: IBC-00000030
Title: Molecular Mechanisms of How Nutrition Regulates Lifespan
PI: Pankaj Kapahi
Type: 3-year Renewal
Reviewers: Full Committee
NIH Guideline Sections: III-D-4, III-E-3, III-F, III-F-8, App C-I, App C-II, App C-III, App C-VIII
Status: Approved, 8/29/2025

This BUA 3-year renewal was reviewed at the 7/31/2025 IBC meeting. Dr. Kapahi informed the IBC Chair that their lab will not be doing future work with *C.elegans,* so no revision regarding this research was needed. Other revisions for final approval included updating PI name, updating the Project Description to include mouse research, including descriptions of how each biological toxin is used, and addressing various minor review comments. These revisions were completed and this BUA was approved for BSL2 research.

5. Review of BUA Renewal Applications
    a. BUA#: IBC-00000036
    Title: The Role of the Immune System in Diet Induced Obesity, Aging, and Sarcopenia
    PI: Dan Winer
    Type: 3-year Renewal
    Reviewers: Full Committee
    NIH Guideline Sections: III-F-8, App C-III, App C-VII, App C-VIII
    Status: Unanimous vote to conditionally approve BUA renewal with minor corrections

    Project description: This protocol seeks to better understand the immune and skeletal muscle mechanisms of how diabetes develops in the setting of its major risk factors, like obesity and aging. To do this, they propose to use commercially available C57BL/6 mice and age-matched C57BL/6 mice genetically engineered to lack different immune cells, immune molecules globally or inside distinct immune cells. These mice are put on a high fat diet, undergo various metabolic tests, and finally have visceral adipose tissue, spleen, blood, liver, skeletal muscle, and intestines drawn and analyzed after being euthanized. Since diet and obesity are also closely tied to neurodegenerative conditions like Alzheimer's disease (AD) and sarcopenia, they plan to collaborate with other Buck Institute scientists who routinely use the amyloid beta overexpression mouse model, 5XFAD. Their research will study perturbations in the gut immune system of 5XFAD mice compared to wild-type and littermate controls, as well as fiber diet interventions on AD gut immunity, by analyzing various mouse tissues.

    Revisions identified for final approval include:
        i. Correct incomplete grant number.
        ii. Add Impact Circle project description to the Overview section.
        iii. Clarify the use of human skeletal muscle in the Human/NHP Materials section.
        iv. Clarify the meaning of "Bacterial, fungal and short tandem repeat testing" in the Human/NHP Additional Details section.
        v. Add Perchloric Acid and its SDS to the Toxins section.
        vi. Although Tamoxifen can be stored in the lab, it needs to be stated that Tamoxifen is not currently in use in multiple sections.
        vii. An outdated IACUC protocol in the Other Approvals section can be deleted.

    b. BUA#: IBC-00000031
    Title: Vivarium Research Support
    PI: Cary McDonald
    Type: 3-year Renewal
    Reviewers: Full Committee
    NIH Guideline Sections: Not Applicable
    Status: Unanimous vote to approve BUA renewal

    This 3-year BUA renewal was first reviewed at the 7/31/2025 IBC meeting. It was decided that more information was needed regarding the activities of the vivarium staff before the IBC could hold a vote to approve. These concerns were addressed during the revision phase, and after further discussion, the IBC agreed that the revisions are sufficient for approval. The animal care and use program director, Cary McDonald, recused herself for the vivarium BUA discussion.

6. Review of New BUA Applications
    a. BUA#: IBC-00000019
       Title: Buck Institute Clinical Research Unit Biohazardous Substances Containment Practices to Help Minimize Occupational Exposure to Biohazards
       PI: John Newman
       Type: New Application
       Reviewers: Full Committee
       NIH Guideline Sections: Not Applicable
       Status: Unanimous consensus to delay vote to approve BUA application until after revision.

       This new clinical research BUA has been reviewed at the May 14 and July 31 IBC meeting, but concerns have lingered regarding whether we have proper expertise on the committee to do the review. IBC members reached out to two additional reviewers with clinical research experience, and both of them responded positively to the contents of the BUA. Prior review comments have been addressed, but the topic of how their SOPs are approved is still being discussed. Currently, clinical staff members create an SOP based on established guidelines and then submit it to senior clinical staff members for approval. The IBC discussed whether there should be another set of SOP reviewers at the Buck Institute that do not belong to the clinical research unit. It was noted that all of the clinical research is reviewed by the Buck Institute's IRB. A new concern regarding the internal sharing of clinical samples also arose, and the IBC discussed the need to implement additional controls to maintain all aspects of safety for these samples. The IBC is requesting that additional information regarding the SOP approval process and sample sharing is included in this BUA before it can be approved.

7. New Items
    a. None

8. Other Items
    a. The IBC Chair will schedule the next round of meetings for 2026.
    b. The IBC Chair will update our SOP titles so that they are distinct from the IACUC set of SOPs.

9. Meeting Adjourned
    a. The meeting adjourned at 2:42pm.

2025 IBC meeting dates: February 19, May 14, July 31, November 7