The Buck Institute for Research on Aging

Institutional Biosafety Committee
Wednesday February 11, 2026
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)
Cary McDonald (Animal Care & Use Program Director)
Meredith Protas, PhD (Genetics, Non-Affiliated Member)

Voting Members Absent: Marilyn Dobbas (RN-retired, Non-Affiliated Member)

Other Attendees: None

1. Call to Order
    a. A quorum was confirmed and the meeting came to order at 1:04pm.

2. Review of Minutes from 11/7/25 IBC Meeting
    a. Prior meeting minutes were reviewed and unanimously approved via email on 11/21/25. These minutes were publicly posted.

    b. No additional edits were brought forward at this meeting.

3. Updates on Future NIH Changes
    a. The IBC was informed that a new biosketch format will be required by the NIH for future grant submissions, but it is unclear if this change impacts biosketches for IBC members at this time. The Chair reached out to an NIH representative for clarification but has not received a response yet.

    b. The IBC discussed potential guideline changes from the NIH regarding biological risk assessment. The committee was notified about two upcoming NIH listening sessions to gather public feedback on this policy revision.

4. Review of Items from Previous IBC Meeting
    a. The Buck Institute IT department and Cayuse support were able to resolve an issue with BUA personnel amendments that was preventing them from being saved. Personnel amendments for Dr. Benz and Dr. Kapahi were completed, and the Chair will administratively approve future updates as needed.

    b. The Chair worked with CITI to provide an optional IBC training course, and access to this course has been disseminated to the committee members.

    c. The Chair performed an annual review of the Standard Operating Procedures (SOPs) managed by the IBC. Only minor edits were made, and the updated SOPs were sent out to all Buck laboratories.

d. Annually required IBC roster submission to the NIH was completed last December.

e. Information related to the IBC roster, 2026 meeting dates, and other details are being updated on the internal Buck Institute EH&S website.

5. Updates on Status of Prior Reviewed BUA Applications
   a. 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: Approved, 12/4/2025

      This new BUA application was first reviewed at the 7/31/2025 IBC meeting. Revisions for final approval (adding Buck Institute core funding, an experimental description and SDS for each listed toxin, and an updated chemical inventory with specific room numbers) had not been finished yet. The Chair worked with Dr. Gerencser to complete these revisions, and this BUA was approved for BSL2 research.

   b. BUA#: IBC-00000031
      Title: Vivarium Research Support
      PI: Cary McDonald
      Type: 3-year Renewal
      Reviewers: Full Committee
      NIH Guideline Sections: Not Applicable
      Status: Approved, 11/7/2025

      This 3-year BUA renewal was first reviewed at the 7/31/2025 IBC meeting. The animal care and use program director, Cary McDonald, completed all requested updates prior to the 11/7/2025 IBC meeting, and this BUA was given final approval at that meeting.

   c. 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: Approved, 12/4/2025

      This 3-year BUA renewal was reviewed at the 11/7/2025 IBC meeting, and the IBC voted to conditionally approve this BUA renewal with minor corrections. These corrections were completed, and this BUA renewal was approved for BSL2 research.

6. Review of BUA Renewal Applications
   a. BUA#: IBC-00000005
      Title: Aging and Age Related Diseases
      PI: Simon Melov
      Type: 3-year Renewal
      Reviewers: Full Committee
      NIH Guideline Sections: III-E-3, III-D-4, App C-III, App C-VII
      Status: Unanimous vote to deny approval

      Project description: This protocol encompasses three different projects to study aspects of senescent cells and their relation to aging. Project 1 seeks to map and validate senescent cells in human muscle, ovary, and breast tissues by trying to identify novel markers in aging tissues and to determine the spatial relationship of senescent cells in these tissues. Project 2 is devoted towards developing new technologies that can detect senescent cells and map their signatures back to human tissues. Project 3 uses single-cell profiling to characterize cell size and senescent gene expression profiles of astrocytes, microglia, and neurons in order to develop a better understanding of how senescent cells impact multiple model systems of Alzheimer's disease at the cellular level. This BUA also includes a study in the differences in longevity between worker and queen honeybees.

This 3-year BUA renewal was reviewed for the first time at this meeting. The IBC determined that there were several aspects of this application that still need attention before it can be approved:

1. Need to mention how human tissue samples are deidentified.
2. A project description for the honeybee research is missing.
3. The use of certain toxins, such as Rotenone and Antimycin A, is not adequately detailed.
4. Some fields in the work practices and collaborator sections are not completed.
5. The listed IACUC protocol is missing some required information.
6. The methodology section needs additional explanation.
7. Various minor corrections and improvements.

The Chair will work with the Melov lab to make these changes.

b. BUA#: IBC-00000039
Title: Quantitative Proteomics to Develop Robust Senescence-Related Biomarkers for Aging
PI: Birgit Schilling
Type: 3-year Renewal
Reviewers: Full Committee
NIH Guideline Sections: not applicable
Status: Unanimous vote to approve

Project Description: The Schilling lab is engaged in multiple projects to investigate cellular senescence and manages the mass spectrometry core at the Buck Institute. These projects include research on the role of senescence within T cell populations in the immune system, studying the decline in functional B and T cells on the molecular level, and establishing biomarkers for healthy versus sub-functional immune systems. As a SenNet Tissue Mapping Center (TMC), the Schilling lab also procures and archives sufficient numbers of healthy and clinically annotated human tissue samples and associated biofluids to detect, spatially map, and characterize their senescent cell subpopulations through Bioanalysis and Data Analysis Cores. Additional projects seek to understand how variants of the APOE gene affect the risk of Alzheimer's disease, gain deeper molecular knowledge regarding joint health and its decline in osteoarthritis by focusing on the interface between cartilage to bone, and uncover fundamental biological and material mechanisms controlling bone quality by focusing on the beneficial effects of exercise. These projects are done in collaboration with other laboratories at the Buck Institute and outside universities, and the Schilling lab primarily acquires samples to be studied in the mass spec core from these collaborators.

This 3-year BUA renewal was reviewed for the first time at this meeting. The IBC found it to be very well written with all sections completed and sufficient description of associated hazards. The Schilling lab does not directly handle samples with a high biological risk. This BUA renewal was fully approved for BSL1 research.

7. 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 vote to approve

This new clinical research BUA has already been reviewed at several IBC meetings. After two additional outside reviewers with clinical expertise provided positive feedback, the IBC determined that this BUA was nearly ready for approval but requested further explanation in the methodology to address how their SOP development and sample sharing processes worked. These two concerns were appropriately addressed, and the IBC voted for full approval.

b. BUA#: IBC-00000032
Title: Hazards Associated with Reproductive Biology Research
PI: Bikem Soygur
Type: New Application
Reviewers: Full Committee
NIH Guideline Sections: III-D-1, III-D-4, III-E-1
Status: Unanimous vote to deny approval

Project Description: The Reproductive Biology Hub (RBH) enables, supports, and promotes cross-disciplinary collaborations between the fields of reproductive science and aging to advance our understanding of the mechanisms underlying reproductive aging. The RBH collaborates with interested researchers to provide training for reproductive biology techniques and uses mouse models to assess reproductive potential, cyclicity, and fertility in female mice through various techniques. The RBH also perform experiments to generate a 3D spatial map of the ovary in order to study communication among distinct ovarian structures within the broader ovarian microenvironment.

This new BUA application was reviewed for the first time at this meeting. The IBC's primary recommendation was to make a better distinction between the research that is performed by members of the RBH and services provided by the RBH for collaborating laboratories. This included discussion about whether this BUA should be split into separate applications, but due to a high degree of overlap between these research projects, this might not be the best approach. The Chair will bring this topic to the Chief Operating Officer for advice on how to proceed. The IBC also found several minor details that need to be updated before there can be a vote for approval. The Chair will work with the RBH to complete the following requested revisions:

1. Update funding information.
2. Reduce biosafety level from 2 to 1 in all sections pertaining to research done by the RBH. However, the BSL might be higher for the services provided by the RBH to collaborators.
3. Add Dr. Duncan to the personnel list and complete all required personnel information.
4. Separately describe research projects and services performed in the RBH.
5. Provide experimental usage description for picric acid.
6. Revise methodology to address each toxin usage and include additional experimental details.

8. Other Items
    a. The IBC discussed a recent amendment to a Webb lab IACUC protocol that requests the use of new toxic compounds to test. The Chair will inform the Webb lab that a BUA amendment must be submitted and approved before this research can begin.
    b. The IBC discussed the expiration dates for a pair of upcoming BUA renewals to manage their review timing correctly.
    c. The IBC determined that a new BUA application should be submitted for the Flow Core.

9. Meeting Adjourned
    a. The meeting adjourned at 3:01pm.

2026 IBC meeting dates: February 11, May 6, August 26, November 11