

Institution	Oklahoma State University - Center for Health Sciences
Meeting Date	Thursday, November 20 2025
Meeting Time	10:00 AM
Meeting Type	Hybrid Meeting

IBC Members Present	Name	Role	Attendance
	Dr. Gerwald Koehler	Committee Chair	Present
	Dr. I-Hsiu (George) Huang	Scientific Member	Absent
	Dr. Sue Katz Amburn	Non-affiliated Member	Present
	Dr. Crystal (Niki) Johnson	Scientific Member	Present
	William (BJ) Reddig	Lab representative	Present
	Dr. Fang (Fiona) Liu	Non-affiliated member	Present
	Dr. David Wallace	Animal Expert	Present
	Dr. Vikram Gujar	Alternate Member - Affiliated Scientist	Absent
Quorum	Quorum is met. The IBC has six (6) voting members present, and four (4) voting members are required to conduct business.		

Others in Attendance	Name	Affiliation	Title
	Kadin Falkensten	Oklahoma State University - Center for Health Sciences	Research Compliance Coordinator, Biosafety Officer

Call to Order	The IBC Chair called this meeting to order at 10:02 am.		
Conflicts of Interest	The IBC Chair asked all members present to identify any conflicts of interest with the materials that are to be reviewed. No conflicts of interest were identified.		
Discussion of previous minutes	No discussion was held about the previous minutes. Dr. Wallace made the motion to approve, and Dr. Liu seconded. All members present were in favor, with none against or abstaining.		
Review and Approval of previous meeting minutes	Date of previous meeting Thursday, October 16 2025	Motion Approve as written	Votes; for/against/abstain 6/0/0

Review of Prior Business	Business	Review and Discussion
	Report of pending/outstanding protocol(s)	Kadin Falkensten gave the report of the pending and outstanding protocols. At the time of this meeting, there is one protocol amendment that is in need of review at the upcoming Biosafety Committee meeting in December.

New IBC Registrations and Amendments for Review		
Review of IBC-00001252		
PI Name(s)	Dr. Subhas Das	
Registration Title/Number	Epigenetic Modulations during Chronic Colon Inflammation.	IBC-00001252
Project Overview	<p>The Das lab has studied acute colon inflammation and found interesting, acute colon inflammation markers involved in the biogenesis and the maintenance of colon inflammation. To understand whether these biomarkers are relatively expressed in chronic colon inflammation like Inflammatory Bowel diseases (IBD), colitis-associated cancer (CAC) or the colorectal cancer (CRC), further studies of these acute biomarkers in chronic studies is warranted. The epigenetic drivers that regulate different novel biomarkers like Glutaminase and Nerve growth factor among others during acute colon inflammation can also be targeted in chronic colon inflammation like IBD, CAC, and CRC. This study will be conducted at Biosafety Level 2 and will involve the use of Sprague Dawley rats. These rats will be inoculated with various chemicals to cause acute and chronic colon inflammation, as well as chemicals that are expected to alleviate the inflamed condition. The colons, brains, and spleens of these rodents will be collected for molecular analysis: DNA extraction to understand epigenetic modulations including DNA methylation and histone modifications, and RNA extraction for quantitative PCR analysis, and protein extraction for Western Blot experiments. No modifications to the tissues will be made by the study team, and no external nucleic acids or host/vector systems will be used. Institutional Animal Care and Use Committee project approval will be sought for all portions of this project involving the use of live, vertebrate animals.</p>	
NIH Guidelines Section	App C-VII, III-D-4-b	
Risk Assessment and	Risk Assessment: Use of Animals with biohazards	

Discussion	Discussion: No additional discussion was held regarding the Risk Assessment		
Training	All personnel listed on this application have completed the minimum required lab safety training courses, including Lab Chemical safety, Bloodborne Pathogens training, and Laboratory Biosafety training. Additionally, all personnel have documented in-lab training for specific procedures that are carried out in each individual lab.		
Additional Training	The IBC recommends that all personnel take the online training courses for Working with Rats and the Animal Researchers training courses.		
Occupational Health Representative Review (if applicable)	All personnel who will be working with animals are to be enrolled in the OLAW-compliant occupational health program prior to beginning work with the animals.		
Biosafety Level Assignment	Biosafety Level:	2	
	Additional Discussion or notes:	No additional discussion regarding the biosafety level was held.	
IBC Vote	Motion:	Table pending additional information	
		1st:	2nd:
	Votes, for/against/abstain/recused:	0/0/0/0	
	Notes:	The Committee determined to table this project review, pending additional information from the PI. If the PI is not using infectious agents on this project, then the Committee will electronically vote on the project after confirming this. If they are using infectious agents, then the project will be reviewed at the next applicable IBC meeting.	

Review of IBC-00001251	
PI Name(s)	Dr. Jacob Manjarrez

Registration Title/Number	Caenorhabditis elegans Molecular Mechanisms of Stress, Aging, and Resilience	IBC-00001251
Project Overview	<p>The nematode <i>Caenorhabditis elegans</i> (<i>C. elegans</i>) is an ideal system for linking molecular biology, neural circuitry, host-microbe interactions, and health. With only 302 neurons, <i>C. elegans</i> display a wide repertoire of intelligent-seeming behaviors: searching for food, following gradients, avoiding toxins, responding to touch, and locating mates. These activities rely on conserved neural and molecular pathways, making the worm a powerful entry point for studying decision-making, stress resilience, and disease mechanisms. For this study, several agents will be used alongside the <i>C. elegans</i> nematode including <i>Lactococcus lactis</i> (bacteria), <i>Leuconostoc massenteroides</i> (bacteria), <i>Pseudomonas aeruginosa</i> (bacteria), and <i>Candida albicans</i> (fungus). These bacterial and fungus species will be grown and used to feed the <i>C. elegans</i> nematode and have a wild-type pathogenicity. No toxin genes are known to be present in any of the coding sequences of these agents. <i>Pseudomonas aeruginosa</i> has known mutations to delete the <i>edd</i> and <i>glpK</i> genes, which negatively affects the biofilm formation and metabolic versatility of the agent. In addition to these agents, In vivo-jetPEI will be used to assist in the transfection of plasmids into the <i>C. elegans</i> nematode. In vivo-jetPEI is a polyvalent polymer-based reagent that condenses nucleic acids into stable nanoparticles of approximately 20-80nm in diameter. Alongside these agents, over 280 plasmids will be used in this study to assist in the study of neural circuits within the <i>C. elegans</i> nematode. The vast majority of these plasmids will come from the Fire Lab <i>C. elegans</i> Vector Kit that is available through Addgene (https://www.addgene.org/kits/firelab/). These plasmids are intended to be used in conjunction with In vivo-jetPEI to transfect nucleic acids into <i>C. elegans</i>, allowing for their neural circuits to be visualized using high-resolution fluorescence microscopy. The plasmids used in this study include: pCFJ909; pCFJ910; pCFJ1201; pCFJ1202; pCFJ1200; pCFJ1272; pCFJ1273; pCFJ496; pCFJ914; pCFJ1208; pCFJ1209; pCFJ1324; pCFJ420 Peft-3::GFP::H2B; pCFJ421 - Pmyo-2::GFP::H2B; pCFJ601 - Peft-3 Moc1 transposase; pMA122 - peel-1 negative selection; pGH8 - pRAB-3::mCherry::unc-54utr; pCFJ90 - Pmyo-2::mCherry::unc-54utr; pCFJ104 - Pmyo-3::mCherry::unc-54; pJL44 - Phsp16.48::MosTase::glh-2utr; pCFJ906; pCFJ907; pCFJ908; pCFJ1000; pCFJ1001; pCFJ1002; pCFJ1258; pCFJ1259; GCaMP variants; RCaMP variants; GFP variants; RFP variants; YFP variants; BFP variants; DsRED variants; mKate variants; APP variants; Htt variants; alpha synuclein variants; LRRK2 variants; TDP43 variants; Chr2 variants; NHpR variants; Arch variants; Mac variants; Queen-2m variants; Slo-3 variants; pBL6/mCherry; and pRS426 TEF/mCherry. A full list of all plasmids used in this study, along with their vector maps, can be found on the Addgene site for the Fire Lab <i>C. elegans</i> Vector kit, or by following this link</p>	

	<p>variants; LRRK2 variants; TDP43 variants; Chr2 variants; NHpR variants; Arch variants; Mac variants; Queen-2m variants; Slo-3 variants; pBL6/mCherry; and pRS426 TEF/mCherry. A full list of all plasmids used in this study, along with their vector maps, can be found on the Addgene site for the Fire Lab C. elegans Vector kit, or by following this link (https://media.addgene.org/cms/filer_public/78/57/78573fd2-a987-42d3-9cda-ba073439cdd8/fire-lab-c-elegans-vector-kit-datasheets-and-maps-addgene.pdf).</p> <p>No intentional modifications will be made to any of the nucleic acid sequences used in this study. It is possible that unintended modifications are made within the C. elegans nematode as they are living organisms, however all agents and nucleic acid materials used in this study will be destroyed at the end of each experiment to prevent any unintended modifications from spreading or recurring. No host/vector systems will be employed in this study. The experimental manipulations in this study include working with animals (nematodes), culturing of bacterial species, culturing of fungal species, working with nanoparticles, administration of agents to animals (nematodes), and use of recombinant or synthetic nucleic acids. The proposed biosafety level of this experiment is Biosafety Level 2.</p>
NIH Guidelines Section	III-D-4-a, III-D-4-b, III-D2, III-D4, III-F2, III-F3, III-F6
Risk Assessment and Discussion	<p>Risk Assessment: Animals with biohazards (non-vertebrate species), generation of splashes possible, sprays or aerosols from centrifugation possible, use of nanoparticles</p> <p>Discussion: No additional discussion was held regarding the Risk Assessment</p>
Training	All personnel listed on this application have completed the minimum required lab safety training courses, including Lab Chemical safety, Bloodborne Pathogens training, and Laboratory Biosafety training. Additionally, all personnel have documented in-lab training for specific procedures that are carried out in each individual lab.
Additional Training	No additional training was outlined by the Committee.

