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| Institution | Oklahoma State University - Center for Health Sciences |
| Meeting Date | Thursday, August 21 2025 |
| Meeting Time | 10:00 AM |
| Meeting Type | Hybrid Meeting |

| IBC Members Present | Name | Role | Attendance |
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| | Dr. Gerwald Koehler | Committee Chair | Present |
| | Dr. I-Hsiu (George) Huang | Scientific Member | Present |
| | 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 | Absent |
| | Dr. David Wallace | Animal Expert | Present |
| | Dr. Vikram Gujar | Alternate Member - Affiliated Scientist | Present, did not vote at this meeting |
| 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 |
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| | Kadin Falkensten | Oklahoma State University - Center for Health Sciences | Research Compliance Coordinator, Biosafety Officer |

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| Call to Order | The IBC Chair called this meeting to order at 10:03 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 of the minutes was had; BJ Reddig made the motion to approve, and Dr. Johnson seconded. | | |
| Review and Approval of previous meeting minutes | Date of previous meeting | Motion | Votes; for/against/abstain |
| | Thursday, July 17 2025 | Approve as written | 6/0/0 |

| Review of Prior Business | Business | Review and Discussion |
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| | Report of pending/outstanding protocol(s) | Kadin Falkensten noted that one protocol amendment was pending review, and described the protocol to the committee. It was determined that this review could be completed electronically. Additionally, Dr. Koehler noted that he will have two renewals soon, and Dr. Gujar also noted that he will be submitting an amendment soon. |

| New IBC Registrations and Amendments for Review | | |
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| Review of Amendment to IBC-00001212 | | |
| PI Name(s) | Dr. Swarup Mitra Dr. Malabika Maulik | |
| Registration Title/Number | Understanding the role of SUMOylation on protein functionality. | IBC-00001212 |
| Project Overview | This project aims to investigate how SUMOylation, a post-translational modification process involving the conjugation of Small Ubiquitin-like Modifier (SUMO) proteins to target substrates, regulates protein stability and cellular signaling. The study will employ mammalian cell lines (human HEK293 and rat B35) as the primary experimental hosts, which will be maintained under standard Biosafety Level 1 (BSL-1) containment conditions. Recombinant DNA constructs encoding SUMO-conjugating enzyme Ubc9 will be used to manipulate SUMOylation pathways in vitro. These plasmids are non-replicative and will be propagated using E. coli DH5α host strains under BSL-1 conditions. The recombinant sequences do not encode any oncogenes, toxins, or virulence factors, and none of the experimental constructs are capable of autonomous replication or viral packaging. Nucleic acid modifications are limited to site-directed mutagenesis to alter SUMOylation consensus motifs, and all sequences are derived from human or murine cDNA sources with published annotations (supporting literature and unpublished laboratory data available). Experimental manipulations include transient transfections, immunoblotting, immunoprecipitation, and confocal microscopy, as well as in vivo validation of SUMO-modified proteins. All recombinant work will be performed under BSL-1 containment, following institutional biosafety and waste decontamination procedures. The agents involved have no known pathogenicity, antibiotic resistance, or environmental persistence risks. This research will contribute to understanding how SUMO modification influences protein function in neural and cellular systems. | |
| NIH Guidelines Section | III-F-1, App C-I, App C-II | |
| Risk Assessment and | Risk Assessment: Generation of splashes, sprays, or aerosols | |

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| 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 | No additional training reequirements were outlined. | | |
| Occupational Health Respresentative Review (if applicable) | No additional occupational health concerns were noted. | | |
| Biosafety Level Assignment | Biosafety Level: | 2 | |
| | Additional Discussion or notes: | No additional discussion was had regarding the biosafety level. | |
| IBC Vote | Motion: | Approve, pending changes outlined below<br>1st: Dr. Johnson | 2nd: BJ Reddig |
| | Votes, for/against/abstain/recused: | | 6/0/0/0 |
| | Notes: | The committee voted to approve this protocol after the list of changes below was nade to the protocol. The changes will be reviewed by the Biosafety Officer to ensure their accuracy before he final approval notification is sent.<br>The following revisions were requested: | |

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| | | 1) In the Human/NHP > Hazardous Procedures section, please add the "Sprays and Aerosols from Centrifugation" procedure to this section as well.<br>2) In the "Facilities" section, for E444, please check the "HEK-293" procedure in the agents list.<br>3) In the Personnel section, please verify that Mason will be working only on the outlined items.<br>4) In the Personnel section, please ensure that all personnel have their appropriate activities selected, as some appear to have only a few activities selected while others have none selected. |

| Review of IBC-00001237 - New Application | | |
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| PI Name(s) | Dr. Subhas Das | |
| Registration Title/Number | Epigenetic Regulation in Pleural Inflammation | IBC-00001237 |
| Project Overview | Through previous studies, the Das lab has found that Glutaminase 1 (GLS1) is a novel biomarker for colon inflammation. To confirm whether GLS1 is a specific marker for colon inflammation, or it is pan-inflammatory marker for other inflammation as well, we wanted to investigate other inflammatory models. For this study a carrageenan-induced pleurisy model leading to pleural inflammation will be studied. This study will involve the use of A549 Lung Carcinoma cells, Lewis Lung carcinoma cells, and tissues harvested from Sprague-Dawley rats post-mortem. A549 and Lewis lung carcinomas are from established, ATCC-purchased cell lines and do not have any characteristics of note. No nucleic acid sequences, aside from those found naturally in the listed cell lines and rats, will be used in this experiment. No host/vector systems will be used in this project, and no modifications will be made to any nucleic acid sequences. This project involves the experimental manipulations of cell culture and working with animals and therefore will have a proposed Biosafety Level of BL-2. This project seeks to establish DNA methylation of GLS gene in acute pleural inflammation, determine if blocking DNA methylation will resolve the pleural inflammation in WT and GLS+/- rats, identify aberrant DNA methylation of GLS during malignant pleural inflammation using tumor cells, and understand the role of ER stress and Unfolded Protein Response (UPR) during pleural inflammation and whether using UPR inhibitors alleviate pleural inhibition. | |
| NIH Guidelines Section | App. C-VII, III-D-4-b | |

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| Risk Assessment and Discussion | Risk Assessment: Use of animals with biohazards (Human/NHP Cell lines); Use of sharps (Glassware) | | |
| | Discussion: Use of animals in conjunction with biohazards can lead to accidental exposure; all personnel will take proper animal handling training, and incidents will be reported to IBC and IACUC immediately. Use of sharps, specifically glassware, noted as the chance of accidently generating sharps via broken glassware is possible; care and attention should be taken in the lab to prevent accidents. | | |
| 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 Respresentative 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: | Care should be taken when handling animals to prevent accidental exposure | |
| IBC Vote | Motion: | Defer Approval pending additional information from PI | |
| | | 1st: Dr. Wallace | 2nd: Dr. Huang |
| | Votes, for/against/abstain/recused: | | 5/0/1/0 |
| | Notes: | Dr. Katz Amburn was not present for the vote, and therefore abstained from voting. The committee determined that more information was needed on this protocol before it could be approved. The have requested a few questions be answered, which are outlined below.<br>The IBC has requested additional information about the following items: | |

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| | | 1) In the Whole Animal Work > Biohazard Procedure section, please expand on how the GLS rats were generated, are the knockout? Please also provide more detail about the GLS rodents.<br>2) In the Human/NHP > Hazardous Procedures section, will any centrifugation occur on this protocol? If so, please add the "Sprays and Aerosols from Centrifugation" procedure.<br>3) In the Personnel section, is Christy still active in this lab? Please remove them if not.<br>4) In the Personnel section, are other personnel working on this project besides yourself and Christy? Please add them if so.<br>5) In the Personnel section, please provide an actual description of the experience for each person listed as it relates to the project, not just a number referencing years of experience such as "25"<br>6) In the Methodology section, please remove the extra line breaks in your experimental description so that the full description can adequately be displayed within the provided text box. |

| New Business | Topic | Discussion |
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| | Review of IBC bylaws | Dr. Koehler lead the committee through a discussion of the IBC bylaws, and the members suggested edits to the section regarding membership durations. The committee discussed a few possible revisions to be made, but it was determined that it would be best if all members individually reviewed the bylaws, made revisions, and compared such revisions at the September meeting. |

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| Additional/Other Business | Review of IBC Minutes format | Kadin Falkensten brough up the revised minutes format to more directly outline specific items. The IBC members gave their feedback, and will review the minutes while comparing them to the NIH-OSP guidelines. |

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| Review of Incidents | No incidents were reported or discused at this meeting. |
| Inspections/Ongoing Oversight | No ongoing inspeections or oversight were discussed at this meeting. |
| IBC Training | No training occurred at this meeting. |
| Public Comments | No public comments were made at this meeting. |
| Adjournment | The IBC Chair moved to adjourn the meeting at 10:57 AM.<br>The next IBC meeting is scheduled for Thursday, September 18 2025. |