Institutional Biosafety Committee Meeting Minutes

La Jolla Institute FOR IMMUNOLOGY | Life Without Disease.

June 11 2025 meeting

A regular meeting of the Institutional Biosafety Committee of the La Jolla Institute for Immunology was held in person on Wednesday, June 11, 2025, at 9:30 AM, with the option to join via Zoom teleconference.

The meeting started at 9:31 AM.

IBC ATTENDANCE: 9 MEMBERS
(12 VOTING MEMBERS, 6 MEMBERS REQUIRED FOR QUORUM)

Regular Members	Present
Alessandro Sette, Ph.D. (Chair)	☑
Mike Barajas (Alternate) CMAR, RLATG	☐
Sylvie Blondelle, Ph.D.	☐
Laurence Cagnon, Ph.D.	☑
Beth Ford, D.V.M.	☑
David Hall, CSP	☑
Peter Jones, BS, LATG	☑
Miguel Reina-Campos, Ph.D. (Vice-Chair)	☑
Stephen Schoenberger, Ph.D.	☑
Kristine Suchey, BS, RVT	☑
Renna Wolfe, Ph.D.	☐
Jeremy Young, BS, MBA	☑
Marianne Zupanc, Ph.D.	☐
Others Present: Jason Vo, Hayley Simon	

Note: Stephen Schoenberger joined via zoom.

Miguel Reina-Campos is the new vice-chair, and 2 members resigned from the IBC

REVIEW AND APPROVAL OF THE MINUTES

The April meeting minutes were approved unanimously with the reviewed modifications.
The April minutes were written in the new NIH preferred format as a test run to explain the changes ahead of the publication of the June meeting minutes.
Keywords, summaries, risk assessment evaluation (considering the agent, the manipulations/activities planned, the likelihood of exposure, and the probability versus consequences of an exposure), risk assessment matrix, training, and occupational health were discussed with respect to the April minutes.

PROTOCOL REVIEW

NEW PROTOCOLS

PI	**Croft**
Protocol #	**BHR16-MC**
Title	SEB toxin
Experimental Procedures	
Agent	Staphylococcal Enterotoxin B (SEB)
Project summary (from form)	We use SEB toxin to induce atopic dermatitis–like skin inflammation in vivo. This in vivo model of atopic dermatitis allows us to identify novel therapeutic targets for treating patients with atopic dermatitis.
Additional details from the protocol	Only permissible amounts of toxin will be available at any time. Max amount in the lab: 2 mg; permissible amount: 100 mg.
Manipulations planned	Toxin resuspension and aliquoting, dermal application to rodents
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	N/A
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	N/A
NA Host(s) and Vector(s)	N/A
Risk Assessment/Training	
Risk Assessment	High
Training	Verified and on record
IBC Assessment	
Proposed Biosafety Level	BSL-2 with BSL-3 practices aimed at containing the aerosols and ABSL-2
CA ATP-L	No
NIH Guidelines	N/A
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed. Action items: place the aliquoted toxin in a locked box with appropriate signage
IBC Approval	
Unanimously approved at the proposed biosafety levels with the discussed modifications	

RENEWALS

PI	**Crotty**
Protocol #	**BHR04-SC**
Title	Epstein Barr virus
Experimental Procedures	
Agent	Epstein Barr virus
Project summary (from form)	EBV will be used to immortalize B cells in vitro
Additional details from the protocol	N/A
Manipulations planned	Virus propagation, infection, tissue culture, centrifugation, pipetting
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	N/A
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	N/A
NA Host(s) and Vector(s)	N/A

Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record (last lab training: 11/12/2024)
IBC Assessment	
Assigned Biosafety Level	BSL-2 with BSL-3 practices aimed at containing the aerosols
CA ATP-L	Yes
NIH Guidelines	N/A
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed, and the relevant IRB protocol number will be added to the protocol.
IBC Approval	
Unanimously approved at the current biosafety levels with the discussed modifications	

PI	**Crotty**
Protocol #	**RDR10-SC**
Title	CRISPR lymphocytes
Experimental Procedures	
Agent	RNAs
Project summary (from form)	Adjuvants are ingredients added to vaccines to improve their effectiveness and generate long lasting immunity. Although clinically approved adjuvants have excellent safety profiles and have been used for well over 70 years, our understanding of how these adjuvants achieve their potency at a cellular and molecular level is poorly understood. Here, we are attempting to genetically edit genes in T and B cells, immune cells that are critical for generating long-lasting immunity, that we believe are important contributors to the cellular mechanisms that give adjuvants their potency. We then plan to transfer these genetically-modified cells back followed by immunization with an adjuvant of interest to track immune responses. We hope to identify novel mechanisms contributing to adjuvant function and eventually learn how we can target these mechanisms for better vaccine design in the future.
Additional details from the protocol	IDT (Integrated DNA technologies) will provide the nucleic acids. Only electroporated cells will be transferred in vivo, no RNAs. The target genes will be downregulated via CRISPR/Cas9 mechanism.
Manipulations planned	Pipetting, centrifugation, electroporation, vortexing, flow cytometry
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	Synthetic, bacteria
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	Guide RNA, enzyme
NA Host(s) and Vector(s)	primary rodent cells
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-1 and ABSL-1
CA ATP-L	No
NIH Guidelines	III-F (Exempt)
Category 1 Research	No
Category 2 Research	No
Discussion	No comments
IBC Approval	
Unanimously approved at the current biosafety levels	

PI	**Saphire**
Protocol #	**RDR06-ES**
Title	Vesicular stomatitis pseudoviruses
Experimental Procedures	
Agent	Vesicular stomatitis pseudoviruses
Project summary (from form)	The lab will be using the Vesicular Stomatitis Pseudoviruses (VSV) as a tool to test antibody binding and viral entry of the pseudovirus. VSV is a replication incompetent pseudo virus that will have the glycoprotein expressed in trans.
Additional details from the protocol	VSV-deltaG-GFP particles that have been pseudotyped with an exogenous surface glycoprotein are capable of one round of infection. The corresponding BHR (BHR02-ES) is used to verify training completion.
Manipulations planned	Pipetting, centrifugation, transfection, cell culture, pseudovirus production, in vitro assays
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	VSV (delta env), glycoproteins genes from Ebola, Lassa, Marburg and Rabies viruses, Jelly fish.
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	Defective genome (delta env), envelope, marker
NA Host(s) and Vector(s)	Human cell line
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-1, BSL-2 and BSL-2 with BSL-3 practices aimed at containing the aerosols
CA ATP-L	Not listed
NIH Guidelines	III-D-1-a, III-D-2-a, III-D-2-b and III-D-3-a
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed. Action items: Clarify which genes will be cloned by the lab to list the correct NIH guidelines
IBC Approval	
Unanimously approved at the current biosafety levels with the discussed modifications	

PI	**Sette**
Protocol #	**BHR16-ADS**
Title	PBMCs derived from the blood of healthy animals
Experimental Procedures	
Agent	Blood or PBMCs from healthy animals
Project summary (from form)	PBMCs from healthy animals will be stimulated in vitro with a synthetic peptide. The PBMCs will be cultured in a 37C incubator 5% CO2 for 6 hours to 14 days. Reactivity to peptide pools will be tested by Flow Cytometry for activated cell markers and Fluorspot Assay that will capture secreted cytokines onto a membrane and then label with fluorescence conjugate.
Additional details from the protocol	The Blood or PBMCs will be received from vetted animal centers
Manipulations planned	Pipetting, tissue culture, centrifugation, vortexing, sonicating, flow cytometry
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	N/A

Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	N/A
NA Host(s) and Vector(s)	N/A
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-2 with BSL-3 practices aimed at containing the aerosols
CA ATP-L	No (per IBC discussion)
NIH Guidelines	N/A
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed, and the RG will be changed to "not assigned by NIH or WHO" in TPS.
IBC Approval	
Unanimously approved at the current biosafety levels with the discussed modifications	

PI	**Sette**
Protocol #	**BHR17-ADS**
Title	PBMCs derived from blood of subjects exposed to Mpox virus
Experimental Procedures	
Agent	Blood, PBMCs, and plasma from subjects individuals exposed to Mpox virus
Project summary (from form)	The PBMC samples from subjects previously exposed to Mpox will be used to characterize antigen-specific T cells. Our goal is to study and understand the T cell immune responses against Mpox. We will study cohorts of healthy donors that have been previously exposed to the infection based on positive serology but do not have an ongoing infection to characterize the epitope recognized by synthetic peptides. We will additionally quantify and dissect qualitatively the response of individuals in the acute phase of the Mpox disease.
Additional details from the protocol	
Manipulations planned	Pipetting, tissue culture, centrifugation, vortexing, sonicating, flow cytometry
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	N/A
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	N/A
NA Host(s) and Vector(s)	N/A
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-2 with BSL-3 practices aimed at containing the aerosols
CA ATP-L	No (per IBC discussion)
NIH Guidelines	N/A
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed, and the flow core location will be added to the protocol.
IBC Approval	
Unanimously approved at the current biosafety levels with the discussed modifications	

PI	**Song**
Protocol #	**BHR05-KKNA**
Title	Blood from healthy animals
Experimental Procedures	
Agent	Blood from healthy animals
Project summary (from form)	The use of animal cells and serum is to test if drug candidates are cross reactive to animal models. This testing is important in the future if safety studies are done with animal models. Specifically, normal serum or cells from healthy animals may be used for in vitro biological assays. ELISA or Bioplex assays on serum will be used to determine cytokine content, human antibody levels (PK or human antibody), or animal IgG levels. PBMC from animals may be used for flow cytometry, antibody-dependent cellular cytotoxicity (ADCC) assays, or for PCR analysis of cell markers or cytokines.
Additional details from the protocol	
Manipulations planned	Pipetting, centrifugation, electroporation, vortexing, flow cytometry
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	N/A
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	N/A
NA Host(s) and Vector(s)	N/A
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-2
CA ATP-L	No (per IBC discussion)
NIH Guidelines	N/A
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed.
IBC Approval	
Unanimously approved at BSL-2 with BSL-3 practices aimed at containing the aerosols (for consistency with BHR16-ADS) with the discussed modifications	

PI	**Song**
Protocol #	**RDR02-KKNA**
Title	Lentiviral vector use for gene knockdown and/or overexpression
Experimental Procedures	
Agent	Lentiviral vectors
Project summary (from form)	We would like to use lentiviral vectors expression systems to express cDNA or shRNA in human primary cells or cell lines to express a gene or to reduce the expression of a gene and to further measure any phenotypic change resulting from the expression. We would like to use pseudotyped lentiviral vector to test whether the viral vectors expressing mutant envelope proteins on the virus surface can change the infection tropism and transduce the transgene to human primary cells and cell lines.

Additional details from the protocol	The corresponding BHR (BHR19-KKNA) is used to verify training completion **Note:** Only the parental viruses are assigned a RG, viral vectors being non replicative are not assigned a RG (per Kathryn Harris)
Manipulations planned	Cloning, pipetting, tissue culture, centrifugation, transfection, electroporation, vortexing, flow cytometry
Recombinant or Synthetic Nucleic Acids	
Source of nucleic sequences (e.g., species)	HIV, human, animal, synthetic, VSV, porcine teschovirus-1, thosea asigna virus, foot-and-mouth disease virus, equine rhinitis A virus, Camelids, Adenovirus, BaEV, Jelly fish, sea anemone
Nature of nucleic acid (NA) sequences (e.g., enzyme, oncogene)	Viral vector, envelopes, packaging, VHH, markers, self-cleaving peptides
NA Host(s) and Vector(s)	Bacteria, human or rodent cells (cell lines or primary cells)
Risk Assessment/Training	
Risk Assessment	Low
Training	Verified and on record
IBC Assessment	
Assigned Biosafety Level	BSL-2, BSL-2 with BSL-3 practices aimed at containing the aerosols for VSV-G pseudotyped viral vectors and ABSL-1
CA ATP-L	No (the parental vector is listed but not the viral vector)
NIH Guidelines	III-D-1-a, III-D-2-a, III-D-3-a and III-D-4-a
Category 1 Research	No
Category 2 Research	No
Discussion	The reviewers' comments were addressed.
IBC Approval	
Unanimously approved at BSL-2, BSL-2 with BSL-3 practices aimed at containing the aerosols levels and ABSL-1 with the discussed modifications	

AMENDMENTS FOR IBC REVIEW

None

AMENDMENTS APPROVED BY BIOSAFETY

- BHR08-SS: addition of a new strain of virus not affecting biosafety levels
- RDR01-PV: addition of genes and vector backbone not affecting biosafety levels

ANNUAL MONITORING

19 protocols due for annual monitoring

These protocols were due for annual monitoring between May 1, 2025, and June 30, 2025. No significant changes were made to the protocols, except for changes related to personnel, funding source, IRB number, IACUC protocol number, or addition of genes, strains or experimental procedures not affecting the approved biosafety levels. These minor changes will be approved administratively by the EH&S office.

CLOSED PROTOCOLS

7 protocols were closed:

- 4 protocols due for annual monitoring were closed (2 from Croft, 1 from Benkahla, 1 from Weiskopf)
- 2 protocols due for renewal were closed (1 from Benkahla, 1 from Saphire)
- 1 protocol from Benkahla was also closed due to the lab moving to City of Hope in Duarte, CA

STORAGE MEMO

None

GENERAL BUSINESS

TPS UPDATES

- A specific toxin tab was added to the Biological Hazard Registration (BHR) form to better capture toxin specific information without omission, such as resuspension or deactivation methods. The questions differ slightly from the information collected for a biological hazard which will help with risk assessment of the various toxin dilutions.
- Two tabs for Category 1 and Category 2 research were added to the BHR form, on May 6, in accordance with the United States Government Policy for Oversight of Dual Use Research of Concern and Pathogens with Enhanced Pandemic Potential.
- A May 5, 2025, Executive Order for Improving the Safety and Security of Biological Research calls for review and revisions of the United States Government Policy for Oversight of Dual Use Research of Concern and Pathogens with Enhanced Pandemic Potential. Updates will be communicated within 180 days of the order and might require changes to the category 1 and category 2 tabs.
- An updated tab for recombinant and synthetic nucleic acid research should be presented at the August IBC meeting.

BSL-3 INCIDENTS
None

NIH REPORTABLE INCIDENTS
None

DURC
None

Meeting adjourned at 10:50 am