

Rutgers University
 Institutional Biosafety Committee (IBC) – Central Campus
 Meeting for NIH Guidelines Materials
 Minutes of December 3, 2025

1. ATTENDEES

<input checked="" type="checkbox"/> Carol Bagnell	<input checked="" type="checkbox"/> Donald Schaffner	<input checked="" type="checkbox"/> Sivarchana Boada - REHS
<input type="checkbox"/> Nada Boustany	<input type="checkbox"/> Milind Shah	<input checked="" type="checkbox"/> Blas Peixoto - REHS
<input checked="" type="checkbox"/> Jeffrey Boyd	<input checked="" type="checkbox"/> Matthew Ferguson - Local Non-Affiliated	<input checked="" type="checkbox"/> Robert Adcock - REHS
<input checked="" type="checkbox"/> Qian Cai	<input type="checkbox"/> Ellen Welch - Local Non-Affiliated	<input checked="" type="checkbox"/> Jacquelyn Vidal - REHS
<input checked="" type="checkbox"/> Julie Caruth	<input checked="" type="checkbox"/> Thomas Boyle - Local Non-Affiliated	<input checked="" type="checkbox"/> Sophia Cheng - REHS
<input checked="" type="checkbox"/> Richard Ebright	<input type="checkbox"/> James Clancy - Local Non-Affiliated	<input checked="" type="checkbox"/> Roseann Kehoe
<input checked="" type="checkbox"/> Zhaohui Feng	<input type="checkbox"/> Jeetendra Eswaraka - Ex Officio	<input checked="" type="checkbox"/> Lanbo Shi
<input checked="" type="checkbox"/> John Hershey	<input type="checkbox"/> Alejandro Ruiz - Ex Officio	<input checked="" type="checkbox"/> Sergei Kotenko
<input checked="" type="checkbox"/> Peng Jiang	<input type="checkbox"/> Bryan Bocco - Ex Officio	<input checked="" type="checkbox"/> Elizabeth Minott - Guest
<input type="checkbox"/> Eric Klein	<input type="checkbox"/> Ron Hart - Co- Chair	<input type="checkbox"/>
<input checked="" type="checkbox"/> John McLaughlin	<input checked="" type="checkbox"/> Brian Eggert - REHS	<input type="checkbox"/>
<input checked="" type="checkbox"/> Latisha Moody	<input checked="" type="checkbox"/> Marija Borjan - REHS	<input type="checkbox"/>

2. MEETING LOGISTICS

CURRENT MEETING		
Called to Order: 12:01 pm	Adjourned: 12:36 pm	Location: WebEx
PREVIOUS MEETING		
Minutes from October 1, 2025		Approved (17:0:0)^{1,2,3}
NEXT MEETING		
Date: February 4, 2026	Time: 12:00 noon	Location: WebEx

CONFLICT OF INTEREST STATEMENT

Committee members with a conflict of interest related to the review of a specific registration may not be involved in the review or approval of a project in which he or she has been or expects to be engaged or has a direct financial interest.

3. PRE-AGENDA

TOPIC	SUMMARY
<p>Old Business:</p> <p>Presidential Executive Order: Improving the Safety and Security of Biological Research</p>	<p>Dual Use Research of Concern</p> <ul style="list-style-type: none">• No updates as of December 2, 2025• Updates will be provided at future IBC meetings when a new Executive Order becomes available <p>Framework for Nucleic Acid Synthesis Screening</p> <ul style="list-style-type: none">• No updates as of December 2, 2025• Updates will be provided at future IBC meetings when new Executive Order becomes available. <p>Website: https://www.whitehouse.gov/presidential-actions/2025/05/improving-the-safety-and-security-of-biological-research/</p>
<p>Old Business:</p> <p>Presidential Executive Order: Improving the Safety and Security of Biological Research</p>	<ul style="list-style-type: none">• On 9/9/25, the NIH launched a new initiative for comprehensive changes to modernize and strengthen biosafety policies, practices, and oversight. The effort aims to revamp biosafety oversight to address biosafety risks in a climate of rapidly advancing science and technology. A secondary aim is to empower Institutional Biosafety Committees (IBCs) and reinforce their positions as a front line for biosafety oversight and ensure that IBCs receive comparable support to committees for human subjects and research animals.• NIH has updated their website with dates for the listening sessions.• Main website: https://osp.od.nih.gov/policies/biosafety-and-biosecurity-policy#tab2/• To submit a comment: https://osp.od.nih.gov/help-modernize-and-strengthen-the-oversight-of-biosafety/
<p>New Business:</p> <p>REHS Staff Update</p>	<ul style="list-style-type: none">• Marija Borjan has joined REHS as a Senior Biosafety Officer.• University Biosafety Officer position has been posted – active as of October

<p>New Business:</p> <p>IBC Membership Updates</p>	<ul style="list-style-type: none"> • Dr. Sergei Kotenko has joined the committee and will be the new co-chair for IBC-North.
<p>New Business:</p> <p>Meeting Schedule for 2026</p>	<ul style="list-style-type: none"> • Meetings will continue to be held on the first Wednesday of the month from 12pm to 2pm.

PROTOCOL REVIEWS

The following protocols were reviewed according to the risk assessment guidelines published in the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules* and the CDC/NIH publication *Biosafety in Microbiological and Biomedical Laboratories*. The risk assessment is documented in the REHS Biosafety Protocol Management System and includes a review of the engineering controls, work practices, safety training, and medical surveillance of project personnel. Individual protocols are evaluated on the following matters as appropriate: the proposed biosafety level and safety practices, agent characteristics, source and nature of agents or recombinant/synthetic nucleic acid sequences and resulting effects of expressed proteins, host animals/ cells, and cloning vectors to be used, and the type of manipulations planned.

Note: Protocols were not necessarily reviewed in the order they appear below.

1. ADMINISTRATIVE APPROVALS

PROTOCOL	PI	MATERIAL(S) OF INTEREST	BSL
19-041	Omary, Bishr	Renewal with minor changes	2
17-002	Sawada, Naoki	Renewal with minor changes	2
19-015	Etchegaray, Jean-Pierre	Renewal without changes	2
13-375	Xie, Lai-Hua	Renewal without changes	2
22-042	Glytsou, Christina	Renewal with minor changes	2
21-029	Bell, Samantha	Renewal without changes	3
13-499	Subbian, Selvakumar	Renewal without changes	3
19-042	Gu, Guoping	Renewal with minor changes	2
19-084	Yang, Jason	Renewal with minor changes	2

2. ADMINISTRATIVE TERMINATIONS

PROTOCOL	PI	TITLE OF PROTOCOL	EXPIRY DATE
None			

3. BIOSAFETY OFFICER REPORT (BSO)			
PROTOCOL	PI	TITLE & MATERIAL(S) OF INTEREST	BSL / GUIDELINES
None			

4. AD HOC MEETING APPROVALS			
PROTOCOL	PI	TITLE & MATERIAL(S) OF INTEREST	BSL
None			

5. NEW PROTOCOLS			
PROTOCOL	PI	TITLE & MATERIAL(S) OF INTEREST	BSL / GUIDELINES
25-031	Shiflett, Michael	<p>Title: Tools for Neural Systems Manipulations</p> <p>Materials: rDNA, AAV, mice</p> <p>Submission Summary: The main goal of this project is to investigate the effects of social isolation stress on brain and behavior markers in an autism mouse model. The protocol was previously approved for behavior studies in neuropilin2 (nrp2) deficient mice. This amendment adds delivery of adeno-associated viruses (AAVs) to manipulate nrp2 expression, an autism-associated gene important for dendrite growth and development. Using cre-loxp, this project will test whether neuron-specific knockdown of nrp2 influences behavior and neural markers of autism. Specifically, they are requesting approval to deliver AAV9 via retroorbital infusion into the mouse brain. The AAVs are sourced from AddGene, are Biosafety Level 1 (BSL1), and are designed to deliver cre recombinase. The AAVs are incompetent and non-pathogenic. The AAV vector introduces Cre-recombinase production in the neurons and Cre interacts with Lox-stop-Lox sequences in the mouse genome to locally manipulate gene expression in the neurons. Specifically, this intervention will reduce expression of nrp2. AAV aliquots will be stored in a -80 freezer, loaded into a syringe in a biosafety cabinet, and injected retro-orbitally with a</p>	1 / III-D-1, III-D-4

		<p>syringe in anesthetized animals. After recovery, animals will be tested on behavior tasks. Biosafety Level 1 containment and work practices will be followed, and animal bedding and carcasses will be autoclaved before disposal as medical waste.</p> <p>Occupational Health: In Place Training: In Place BioAudit: Facilities are Acceptable</p> <p>IBC Vote: Conditionally Approved (17:0:0)¹</p> <p>Conditions:</p> <ol style="list-style-type: none"> 1. Additional clarification of gene targets is requested in the Project Description section. 	
25-036	Sekiguchi, Rei	<p>Title: Analyses of Regeneration – Associated Genes in Wound Healing</p> <p>Materials: rDNA, AAV, mice, E.coli</p> <p>Submission Summary: This protocol involves the study of genes that influence fibroblast function, wound healing, and tissue regeneration. Selected human and mouse genes, including those involved in extracellular matrix remodeling, antioxidant defense, anti-senescence pathways, and key signaling regulators, will be delivered using replication-defective adeno-associated virus (AAV) vectors for induction, overexpression, or perturbation of target gene activity. The nucleic acid sequences are non-pathogenic and are not derived from oncogenes or toxins. Genetic modifications include insertion of the target genes into AAV vectors for expression in host cells.</p> <p>Recombinant AAV vectors will be produced in cultured human HEK293 cells and purified using standard methods. Plasmid assembly for AAV production will be carried out in Escherichia coli. Experiments will be performed in vitro using primary human or mouse fibroblasts, and in vivo in mice through administration of AAV to fibroblasts at wound sites to assess effects on tissue repair and regeneration. Tissue samples will be collected at defined time points post-injection for gene expression analysis and histological evaluation of wound healing.</p>	2 / III-D-1, III-D-4

		<p>All work is conducted under BSL-2/ABSL-2 containment following institutional biosafety guidelines. Personnel use standard personal protective equipment, Class II biosafety cabinets for vector manipulations, and leakproof secondary containers for transport of biological materials. Mice are restrained using approved methods during injections to minimize exposure risk. All waste is autoclaved or disposed of as regulated medical waste, and work surfaces are disinfected with bleach and ethanol.</p> <p>Occupational Health: In Place Training: In Place BioAudit: Required before commencing work (Provision of approval)</p> <p style="text-align: center;">IBC Vote: Approved (16:0:0)¹</p>	
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6. AMENDMENTS			
PROTOCOL	PI	TITLE & MATERIAL(S) OF INTEREST	BSL / GUIDELINES
19-079	De, Subhajyoti	<p>Title: Genomic investigation of cancer</p> <p>Materials: rDNA, CRISPR-Cas12a, human materials</p> <p>Submission Summary: The main goal of this project is to develop and apply genomic approaches to track cancer progression. Previously approved for genomic investigation of multiple types of cancer using deidentified tissue, blood, and urine samples. Isolation of tissue-derived and cell-free nucleic acids including cell-free DNA and cell-free RNA have been standardized. This amendment adds CRISPR-Cas12 based approach to allow sensitive and non-invasive detection of cancer with fast turnaround time. The genomic approaches will be benchmarked and evaluated using CRISPR, sequencing, and PCR-based approaches. Deidentified genomic data will be securely stored and analyzed to provide status on the tumor burden and genetic differences therein.</p> <p>Sonication will be performed inside a certified biological safety cabinet (BSC) whenever possible to provide protection from potential aerosol generation. When a BSC is not available, sealed or</p>	2 / III-E

		<p>capped tubes will be used, and samples will be allowed to rest for several minutes after sonication before opening to allow aerosols to settle. Lab personnel will wear appropriate personal protective equipment (PPE), including a lab coat, gloves, and eye/face protection at all times. The equipment and surrounding area will be thoroughly disinfected after use to minimize contamination risks.</p> <p>Occupational Health: In Place Training: In Place BioAudit: Facilities are Acceptable</p> <p style="text-align: center;">IBC Vote: Approved (17:0:0)¹</p>	
22-039	Corbett, Brian	<p>Title: Chronic Social Defeat Stress (CSDS) in LC DREADDs mice</p> <p>Materials: AAV, Uropathogenic E. coli, mice</p> <p>Submission Summary: The Corbett Lab studies stress neuroscience, including use of the chronic social defeat stress (CSDS) paradigm in mice and experiments to study a G-protein coupled receptor called sphingosine-1-phosphate receptor 3 (S1PR3) that increases sociability. Viral vectors are used to inhibit neural projections to investigate the mechanisms by which S1PR3 increases sociability. This amendment adds adeno-associated virus (AAV) vectors to a protocol previously approved for canine adenovirus (CAV) vectors. The AAV and CAV vectors used are replication deficient and encode reporter genes and Designer Receptors Exclusively Activated by Designer Drugs (DREADDs), which are only activated by the synthetic compounds clozapine-N-oxide, which is not found in humans or other mammals naturally. The viral agents used are unmodified circulating strains; no changes are made to virulence, host range, or antiviral susceptibility. Experimental manipulations include viral vector delivery to mouse brain regions by stereotaxic injection. This amendment also adds a new project for studying the mechanisms by which bacteria establish colonies in the gut and experiments involving a pathogenic E coli strain unable to produce sphingolipids. The E coli strain can be uropathogenic, but this is not expected under normal lab conditions since direct exposure to the</p>	2 / III-D-1, III-D-4

		<p>urinary tract is required for infection. Planned endpoints for the new projects include 16S rRNA sequencing, immunohistochemistry, RNA sequencing, qRT-PCR, social interaction testing, and light/dark box testing. Biosafety level 2 containment practices will be used for the new projects. All personnel will use standard personal protective equipment and perform all experimental manipulations in certified biosafety cabinets. All waste materials and animal tissues will be sterilized or chemically disinfected prior to disposal.</p> <p>Occupational Health: In Place Training: In Place BioAudit: Facilities are Acceptable</p> <p style="text-align: center;">IBC Vote: Approved (16:0:0)^{1,3}</p>	
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¹ Voting Decision (Yay: Nay: Abstain)

² Member(s) joined the meeting

³ Member(s) left the meeting