



Environmental Health & Safety Assistant

Principal Investigator's Guide for submissions to the
Biological Safety Committee

The online application for submitting protocols to the Biosafety Committee is available at: <http://ehs.uth.tmc.edu>



THE UNIVERSITY of TEXAS

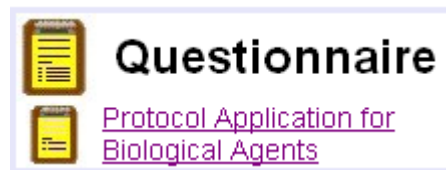
HEALTH SCIENCE CENTER AT HOUSTON

Environmental Health & Safety Assistant Login

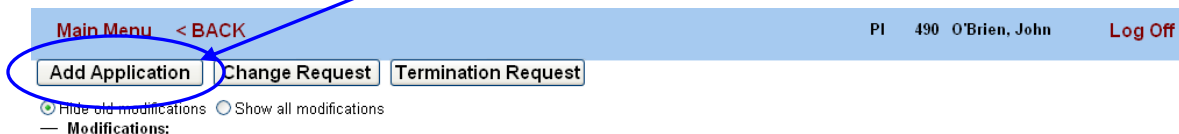
Username

Password

- Logon to the system with your UT-H userid and password.
- From the main login page, select the icon to complete the “Protocol Application for Biological Agents”:



- Select the option to “**Add an application**”.



The application then begins to appear as individual panels.

General Project Information

The permit number will be “New” and the purpose will be “initial” for all new applications. Complete each page as follows:

Goto Section [My Applications / Back](#)
Display Options

Permit number application is associated with:

?

What is the purpose of this application?

Project Title:

- Type the **“Project Title”**. You can copy and paste information into this field as necessary.
- Press the “Save and Continue” button when you are done.

The section names will appear at the top of each panel in the “Goto Section” area. You can use the drop-down menu to move to another panel.

P.I. Information

Goto Section [My Applications / Back](#)
Display Options

PI Information:

P.I. Name

Department

Position

Phone Number

Fax Number

When appropriate, the panel will provide an **“autofill all” button** which will automatically pull in information from the EH&S electronic system. If the information is not correct or

is missing, you can simply type in the field however, you should notify the EH&S office with the updated information.

- Press the “**Save and Continue**” button.

Protocol Summary

This is where you should enter the brief lay description of your research. You can copy and paste from WORD into this text editor box.

Goto Section Protocol Summary [My Applications / Back](#)
Display Options Hide Review Questions.

Protocol Summary: Please include a brief summary, in lay terms, of the proposed project which highlights the safety measures to be taken when conducting experimentation. As an attachment please also provide a copy of your methods, standard operating procedures, or any relevant copies of citations or articles. Please define all acronyms.

- Press the “**Save and Continue**” button.

Recombinant DNA

If you are using Recombinant DNA, click the box and read the instructions for how to complete the table.

Goto Section Recombinant DNA [My Applications / Back](#)
Display Options Hide Review Questions.

Check here if you are using Recombinant DNA:

If YES, please fill out the table below describing the recombinant DNA technology to be used. If NO, please proceed to the next section to list the biological agents that you will use in your protocol.

Instructions and definitions for completing the grid:

1. Biological agents - Include agent, strain, concentrations to be used and source info
2. Manipulations - Example: Cloning of protein X into adenoviral vector
3. Agent Characteristics - Antibiotic resistance? Toxin producing? Unique strain characteristics? Bioengineered safety controls?
4. Source of inserted DNA sequence - Please list
5. Name of inserted DNA sequence - Example: structural gene
6. Host(s) and vector(s) to be used - Example: Host-rat cardiomyocytes and HEK 293; vector - adenovirus serotype V
7. Expression of Foreign Gene
8. BSL - Select the highest appropriate biosafety level

	Biological Agents	Manipulations	Agent Characteristics	Source of inserted DNA sequence	Name of inserted DNA sequence	Host(s) and vector(s) to be used	Expression of foreign gene if so protein produced	BSL Level	NIH Guidelines
Add+									

Additional information (if necessary):

- Press the **“Add+”** button to expand the table. It will look like this and expand beyond the right side of your page. A scroll bar will appear so you can move to the fields that are beyond the view on your screen.

Add+	Biological Agents	Manipulations	Agent Characteristics	Source of inserted DNA sequence
unsaved				

Additional information (if necessary):

- Fill in the information in each box. You can copy and paste from another document if necessary however special characters may be lost.

Add+	Biological Agents	Manipulations	Agent Characteristics	Source of inserted DNA sequence
Delete	Autographa californica nuclear polyhedrosis virus (AcNPV)	Introduce connexin genes or gene fragments into viral genome via Tn7-mediated recombination in bacterial	Kanamycin resistance. Virus is replication competent and infectious to some insects. Not known to be	Connexin sequences from cDNA isolated in PI's lab or from commercially available I.M.A.C

- To add a second row of data, press the **“Add+”** button again.
- Continue adding rows as necessary
- To remove a row, press the **“Delete”** key.
- If additional information needs to be submitted, use the text box to enter any additional notes.

Bioagents involved

This is the panel where you will enter the different biological agents being used in your study.

- Use the **“Add+”** and **“Delete”** buttons as necessary.
- If additional information needs to be submitted, use the text box to enter any additional notes.

Goto Section [My Applications / Back](#)
 Display Options

Biological agents involved - Please select the biological agents to be used in this protocol from the list below, or manually insert.

Click "Add" to enter a biological agent. Click on the "?" to allow you to select information from the tables in the EH&S Safety system. Additional information can be added after the information is pulled from the system.

<input type="button" value="Add+"/>	Category	Specific Agent	Strain	Concentration	Bioengineered safety controls	Biological agent source info	Additional information
-------------------------------------	----------	----------------	--------	---------------	-------------------------------	------------------------------	------------------------

Additional information (if necessary):

This grid allows you to use a "look-up table" to find the name of the biological agent. Click on the "?" to find the list of agents.

<input type="button" value="Add+"/>	Category	Specific Agent	Strain	Concentration	Bioengineered safety controls
unsaved					

The following screen will appear:

Pick a Bioagent

or

---	Bioagent Name	Category	Permit Number
Select	Zebrafish	Transgenic anim	B-490-A

If you are using other agents on active protocols, they will be displayed in the list. If you are using those agents again, you can simply "select" them by pressing the "Select" button. If you are using other agents, click on the "Pick from all Bioagents" button to view the table.

Pick From All Bioagents (Choose a "Category" First)

or

---	<u>Category</u>
Select	Bacteria
Select	Cells (animal)
Select	Cells (human)
Select	Cells (primate)
Select	Fungi
Select	Human fluid
Select	Other
Select	Parasites
Select	Plasmid
Select	Protozoa
Select	Toxin
Select	Transgenic anim
Select	Vector
Select	Virus

- Press the **"Select"** button next to the category you need. A list of bioagents will appear:

Pick From All Bioagents where Category="Cells (human)"

or

Select	Human breast cancer cell lines	Cells (human)
Select	Human breast epithelial cell lines	Cells (human)
Select	Human bronchial epithelial cell lines	Cells (human)
Select	Human cell line (BCBL-1)	Cells (human)
Select	Human cell lines	Cells (human)
Select	Human cells	Cells (human)
Select	Human cerebral cortex	Cells (human)
Select	Human cervix cell line	Cells (human)
Select	Human colon cancer cells	Cells (human)
Select	Human dental pulp cells	Cells (human)

- Press the **"Select"** button next to the one you need.

If the one you are looking for is NOT in the list, then select any bioagent and type over the field once it displays on the table.

Add+	Category	Specific Agent
unsaved	Virus ?	Autographa californica nuclear polyhedros

- Complete the rest of the information in the grid as appropriate.

Use of Human Subjects

This panel asks you to report the use of human subjects and other information related to CPHS approvals.

Goto Section [My Applications / Back](#)
Display Options

Required fields:

Are you using Human Subjects in your research?

CPHS Number :

CPHS Status:

You will have the ability to attach a copy of approval letter (if available) at the end of this application.

NOTE: The fields with a pink background are required fields and the system will not allow you to move ahead in the application until those questions are answered.

Use of Animals in Research

This panel asks you to report the use of animals and other information related to AWC approvals.

Goto Section [My Applications / Back](#)
Display Options

Required fields:

Are you using animals in your research?

AWC Number:

AWC Status:

	Species	Species (if not in list)	Strain	Animal Housing Location	Manipulation Room Locations	NIH Guidelines	Additional Information
<input type="button" value="Add+"/>							

You will have the ability to attach a copy of approval letter (if available) at the end of this application.

This panel also uses a grid to allow you to expand the information related to animal use on the protocol.

- Use the **"Add+"** and "Delete" buttons as necessary.

Biosafety Level/rDNA Classification

This panel asks you to determine the BSL level and select the rDNA classification for recombinant DNA if appropriate. Select all that apply.

Goto Section [My Applications / Back](#)
Display Options

Biosafety Level (BSL) - Please use the guidelines below as a reference to accurately assign the proper section of the NIH Guidelines that is applicable to your rDNA work. Based on the risk assessment of the biological agents involved, please select the highest level to be used in this protocol.

NIH rDNA Classification (for recombinant DNA only) - Select all that apply:

Section III-A Experiments that require Institutional Biosafety Committee (IBC) approval and NIH Director approval before initiation of experiments.

- III-A-1-a** - Deliberate transfer of a drug resistance trait to microorganisms that are not known to acquire the trait naturally, if such acquisition could compromise the use of the drug to control the disease agents in humans, veterinary medicine or agriculture.

Section III-B Experiments that require NIH/OBA and IBC approval before initiation.

- III-B-1** - Deliberate formation of rDNA containing genes for the biosynthesis of toxin molecules lethal for vertebrates at an LD50 of less than 100 nanograms per kg body weight (e.g. microbial toxins such as tetanus toxin).

Section III-C Experiments that require IBC and Institutional Review Board (IRB) approvals, and NIH/OBA registration before initiation.

- III-C-1** - Experiments involving the deliberate transfer of (1) recombinant DNA or (2) DNA or RNA derived from recombinant DNA into one or more human subjects.

Section III-D Experiments that require IBC approval before initiation of experiments.

- III-D-1-a** - Introduction of recombinant DNA into Risk Group 2 (RG-2) agents is usually conducted at BL2 containment. Experiments with such agents will usually be conducted with whole animals at BL2 or BL2-N containment.
- III-D-1-b** - Introduction of recombinant DNA into Risk Group 3 (RG-3) agents is usually conducted at BL3 containment. Experiments with such agents will usually be conducted with whole animals at BL3 or BL3-N containment.
- III-D-2-a** - Experiments in which DNA from Risk Group 2 or Risk Group 3 agents is transferred into nonpathogenic prokaryotes or lower eukaryotes may be performed under BL2 containment. Experiments in which DNA from Risk Group 4 agents is transferred into nonpathogenic prokaryotes or lower eukaryotes may be performed under BL2 containment after demonstration that only a totally and irreversibly defective fraction of the agent's genome is present in a given recombinant. In the absence of such a demonstration, BL4 containment shall be used. The Institutional Biosafety Committee may approve the specific lowering of containment for particular experiments to BL1. Many experiments in this category are exempt from the NIH Guidelines.
- III-D-3-a** - Experiments involving the use of infectious or defective Risk Group 2 viruses in the presence of helper virus may be conducted at BL2.
- III-D-3-b** - Experiments involving the use of infectious or defective Risk Group 3 viruses in the presence of helper virus may be conducted at BL3.
- III-D-3-d** - Experiments involving the use of infectious or defective restricted poxviruses in the presence of helper virus shall be determined on a case-by-case basis following NIH/OBA review. A U.S. Department of Agriculture permit is required for work with plant or animal pathogens..

- III- D-3-e** - Experiments involving the use of infectious or defective viruses in the presence of helper virus which are not covered in [Sections III-D-3-a](#) through III-D-3-d may be conducted at BL1.
- III- D-4-a** - Recombinant DNA, or DNA or RNA molecules derived therefrom, from any source except for greater than two-thirds of eukaryotic viral genome may be transferred to any non-human vertebrate or any invertebrate organism and propagated under conditions of physical containment comparable to BL1 or BL1-N and appropriate to the organism under study. Animals that contain sequences from viral vectors, which do not lead to transmissible infection either directly or indirectly as a result of complementation or recombination in animals, may be propagated under conditions of physical containment comparable to BL1 or BL1-N and appropriate to the organism under study. Experiments involving the introduction of other sequences from eukaryotic viral genomes into animals are covered under [Section III-D-4-b](#), *Experiments Involving Whole Animals*. For experiments involving recombinant DNA-modified Risk Groups 2, 3, 4, or restricted organisms, see [Sections V-A, V-G, and V-L](#), *Footnotes and References of Sections I-IV*. It is important that the investigator demonstrate that the fraction of the viral genome being utilized does not lead to productive infection. A U.S. Department of Agriculture permit is required for work with plant or animal pathogens.
- III- D-4-b** - For experiments involving recombinant DNA, or DNA or RNA derived therefrom, involving whole animals, including transgenic animals, and not covered by [Sections III-D-1](#), *Experiments Using Human or Animal Pathogens (Risk Group 2, Risk Group 3, Risk Group 4, or Restricted Agents as Host-Vector Systems)*, or [III-D-4-a](#), *Experiments Involving Whole Animals*, the appropriate containment shall be determined by the Institutional Biosafety Committee.
- III- D-4-c-1** - Experiments involving the generation of transgenic rodents that require BL1 containment are described under [Section III-E-3](#)
- III- D-4-c-2** - The purchase or transfer of transgenic rodents is exempt from the *NIH Guidelines* under [Section III-E](#), *Exempt Experiments*
- III- D-5** - Experiments to genetically engineer plants by recombinant DNA methods, to use such plants for other experimental purposes (e.g., response to stress), to propagate such plants, or to use plants together with microorganisms or insects containing recombinant DNA, may be conducted under the containment conditions described in Sections [III-D-5-a](#) through III-D-5-e. If experiments involving whole plants are not described in [Section III-D-5](#) and do not fall under Sections [III-A](#), [III-B](#), [III-D](#) or [III-F](#), they are included in Section [III-E](#).
- III- D-6** - Experiments involving more than 10 liters of culture. The appropriate containment will be decided by the IBC. Where appropriate Appendix K of the guidelines will be used to determine containment.

Section III-E Experiments that require IBC notification simultaneously with initiation.

III- E - Experiments not included in Sections [III-A](#), [III-B](#), [III-C](#), [III-D](#), [III-F](#), and their subsections are considered in [Section III-E](#). All such experiments may be conducted at BL1 containment.

- III- E-1** - Recombinant DNA molecules containing no more than two-thirds of the genome of any eukaryotic virus (all viruses from a single Family being considered identical) may be propagated and maintained in cells in tissue culture using BL1 containment. For such experiments, it must be demonstrated that the cells lack helper virus for the specific Families of defective viruses being used. If helper virus is present, procedures specified under [Section III-D-3](#), *Experiments Involving the Use of Infectious Animal or Plant DNA or RNA Viruses or Defective Animal or Plant DNA or RNA Viruses in the Presence of Helper Virus in Tissue Culture Systems*, should be used. The DNA may contain fragments of the genome of viruses from more than one Family but each fragment shall be less than two-thirds of a genome.
- III- E-2** - Experiments involving recombinant DNA-modified whole plants, and/or experiments involving recombinant DNA-modified organisms associated with whole plants, except those that fall under Section [III-A](#), [III-B](#), [III-D](#), or [III-F](#). See Section III-E-2 for recommendation of containment level.
- III- E-3** - Experiments involving the generation of rodents in which the animal's genome has been altered by stable introduction of recombinant DNA, or DNA derived therefrom, into the germ-line (transgenic rodents). Only experiments that require BL1 containment are covered under this section; experiments that require BL2, BL3, or BL4 containment are covered under [Section III-D-4](#)

Section III- F Experiments that are exempt from NIH Guidelines. Registration with the IBC is not necessary except for transgenic rodents.

- III-F-1** - Recombinant DNA molecules are not in organisms or viruses.
- III-F-2** - Recombinant DNA molecules that consist entirely of DNA segments from a single nonchromosomal or viral DNA source, though one or more of the segments may be a synthetic equivalent.
- III-F-3** - Recombinant DNA molecules that consist entirely of DNA from a prokaryotic host including its indigenous plasmids or viruses when propagated only in that host (or a closely related strain of the same species), or when transferred to another host by well established physiological means.
- III-F-4** - Recombinant DNA molecules that consist entirely of DNA from a eukaryotic host including its chloroplasts, mitochondria, or plasmids (but excluding viruses) when propagated only in that host (or a closely related strain of the same species).
- III-F-5** - Recombinant DNA molecules that consist entirely of DNA segments from different species that exchange DNA by known physiological processes though one or more of the segments may be synthetic equivalent.
- III-F-6** - Recombinant DNA experiments that do not present a significant risk to health or the environment, as determined by the NIH Director, with the advice of the RAC, and following appropriate notice and opportunity for public comment.

Personnel

This page allows you to identify all key study personnel for your project. The panel includes a section for UT-H personnel and non-UT-H personnel. If the UT-H person is in the EH&S system already, their information can be pulled from the system.

Goto Section: Personnel [My Applications / Back](#)
 Display Options: Hide Review Questions. Apply

Personnel: Please list each person who will be participating on the project along with a summary of education, experience and training as it relates to the use of the proposed biological units. UTHSC-H personnel may be selected from the drop-down list below. Please indicate when applicable all persons not employed through UTHSC-H by manually inserting them in the table at the bottom of this page.

A list of people associated with your labs will appear. Click the "Delete" key to remove any names. Click "Add" and then click on the "?" to select the names from the master lists in the EH&S Safety system. If the name is in the list, the individuals' training information will be pulled from the system. Additional information can be added after the information is pulled from the system.

The PI's name and any associated lab workers' names will be displayed in the grid below. To remove a name, simply click on the "Delete" button and press "Save". To add names:

- Click on the "Add+" button. The screen will look like this:

UTHSC-H Personnel

Add+	Last Name	First Name	Education Summary	Experience	Training
unsaved	<input type="text"/>	<input type="text"/>			

- Click on the "?". The screen will look like this:

Pick a linked Worker
 or

---	Worker Name	Worker Type	Department	Room Number	Office Phone	Lab
Select	KOTHMANN, WILLIAM W.	STD	GRADUATE SCHOOL OF BIOMEDICAL			
Select	LI, XIAOFAN	ADM	Ophthalmology & Visual Science	MSB 7.422		
Select	O'Brien, John	PI	Ophthalmology & Visual Science	MSB 7.024	713-500-5983	--

If you have lab workers associated with other projects you are working on, their names will appear in the list.

UTHSC-H Personnel

Add+	Last Name	First Name	Education Summary	Experience	Training
unsaved	LI	XIAOFAN			BCLS: Basic Laboratory & Clinic Safety Training on 05/01/2006

If the person has training on file in the EH&S system, the names of those training classes will automatically appear in the table. A person may have taken training

classes that have not been recorded in the EH&S system. You should explain that in the text box if no training classes appear.

- Add any additional information as appropriate to the table.

If you are looking for a name of a person who does not appear in this list, click on the “Pick from all workers” button at the top of the panel.

Pick a linked Worker

or

The following will appear:

Pick from All Workers (Choose a “1st Letter of Last Name” First)

or

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Select the appropriate letter of the alphabet. A list of names starting with that letter will appear:

Pick from All Workers where 1st Letter of Last Name="M"

or

---	Worker Name	Worker Type	Department	Room Number
Select	Ma, Liangsuo	sta		
Select	Ma, Quan	STA	Neurosurgery	
Select	MA, XIAOPING	ADM		
Select	MAADANI, ARASH	LW		MSB 1.304
Select	MACALLISTER, REBECCA	STD		
Select	MACDONALD, ELLEN A.	ADM		
Select	Macdougall, Daniel	STA		
Select	MACENZIE, RONALD	LW		
Select	MACH, CLAIRE	LW	Obstetrics, Gyn. & Rep. Scienc	MDAnderson er

If you see the name you want, select it by pressing the “select” button on the left. If the name does not appear, press the “Cancel” button to return to the grid where you can type in the name of the individual you were looking for. Include any additional information about training, experience and education.

UTHSC-H Personnel

Add*	Last Name	First Name	Education Summary	Experience	Training
unsaved	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- Use the bottom grid on the page to enter any information on Non-UT personnel since they will not be in the EH&S system.
- Use the text box to enter any additional information that may be applicable.

Additional information (if necessary):

Each individual mentioned has been through the Basic Laboratory and Clinical Safety Training course inclusive of Bloodborne Pathogens training.

- When you are finished, press the **“Save and Continue”** button.

Protective Equipment

This panel asks you to identify all protective equipment to be used in the lab for this research project.

- Check the boxes next to the items you will be utilizing.
- Use the text box to explain any additional information.

Goto Section [My Applications / Back](#)
Display Options

Protective Equipment: The following standard personal protective equipment will be used: full length lab coats, disposable gloves, long pants, close-toed shoes, protective eyewear or face shields and disposable pipette tips.
Please select all other applicable items from the following list and include locations and certification dates for biological safety cabinets

Safety centrifuge cups

Sealed centrifuge rotor

Biosafety cabinet

Number of biosafety cabinets and date of cabinet certification:

Respiratory protection

Please specify type:

In-line vacuum filter

Chemical fume hood

Additional comments/specific details:

Location of Work

This panel allows you to select lab locations that will be used during the research project. It works similarly to the "Personnel" panel in that if the PI has labs already associated with their research, the labs will be "linked" to the PI and will display in the grid. You can remove a location by pressing the "Delete" key and then pressing the "Save" key.

Goto Section Location of Work My Applications / Back
 Display Options Hide Review Questions. Apply

Cancel Changes Save Save & Continue

Location of Work: Please select your lab locations from the list below where the work for this protocol will be conducted. Describe the procedures to be performed in each location.

A list of labs currently associated with the PI will appear. Click the "Delete" key to remove a lab. Click "Add" and then click on the "?" to allow you to select a building and lab from the master tables in the EH&S Safety system. Additional information can be added after the information is pulled from the system.

To Add a lab:

- Use the "Add+" and "Delete" buttons as necessary.
- Click on the "?".

Building	Lab	Purpose of use	Bio-Safety cabinet in room?
Add+	?		<input type="checkbox"/>

A list of linked labs will display:

Pick a linked lab Cancel
 or Pick from All Labs

---	Location	Building Name	Lab/Room	Fume Hood?
Select	MSB:3.500	Medical School Building	3.500	.
Select	MSB:7.237	Medical School Building	7.237	.
Select	MSB:7.422	Medical School Building	7.422	.
Select	MSB:7.428	Medical School Building	7.428	Y
Select	MSB:7.428	Medical School Building	7.428	Y

- Click on the "Pick from All Labs" button to select a lab from a master list of all labs at the University.
- You will have to select the "Building Name" first.

Pick from All Labs (Choose a "Building Name" First)

or

Pick a linked lab

---	Building Name
Select	Aldine Westfield WIC
Select	Brownsville RAHC
Select	Child Development Center
Select	Cyclotron Facility
Select	DeMoss WIC Clinic
Select	Dental Branch
Select	Denton A. Cooley
Select	Harris County Psychiatric Hospital
Select	Hermann Hospital

A list of all labs in that building will appear:

Select	MSB:7.223A	Medical School Building	7.223A	.
Select	MSB:7.223B	Medical School Building	7.223B	.
Select	MSB:7.225	Medical School Building	7.225	Y
Select	MSB:7.227	Medical School Building	7.227	.
Select	MSB:7.227A	Medical School Building	7.227A	.

- Select the lab by pressing the **"Select"** button on the left.
- Complete the additional information.

Add+	Building	Lab	Purpose of use	Bio-Safety cabinet in room?
unsaved	Medical School Building ?	7.225	BSC for cel culture work	<input checked="" type="checkbox"/>

- If the lab does not appear in the list, you can manually type the building name and room number in the appropriate fields.
- Use the text box for any additional information.

Biological Waste Disposal and Decontamination

This panel allows you to describe the types of biological waste disposal and spill and surface decontamination that will be used during your research project.

- Use the **"Add+"** and "Delete" buttons as necessary.

Cancel Changes Save Save & Continue Autofill all

Biological waste disposal/Spill & Surface Decontamination: Please select the waste to be generated from the list below and describe the procedures for waste disposal for this project. Include waste disposal/disinfection practices and methods for transport of waste through the facility for disposal.

Add+	Type of Waste	Method of Decontamination	Description (if Other) or Autoclave location	Mixed waste?	Method of Disposal	Additional Description
-------------	---------------	---------------------------	--	--------------	--------------------	------------------------

Additional information (if necessary):

Contact the Environmental Protection Program at 713-500-8100 for more information regarding proper waste disposal at UTHSC-H. Contact CLAMC at 713-500-4453 for scheduling disposal of animal carcasses.

Use the drop-down menus in the grid to further describe the processes to be used.

Add+	Type of Waste	Method of Decontamination	Description (if Other) or Autoclave location	Mixed waste?	Method of Disposal
Delete	Liquid Waste	10% bleach		-- No Selection --	
Delete	Spills and surface decontamination	10% bleach		-- No Selection --	

- Use the text box for any additional information.

Shipping Infectious Substances

This panel allows you to describe the shipment of any infectious substances.

Cancel Changes Save Save & Continue Autofill all

Shipping infectious substances or patient specimens

Check here if you are shipping infectious substances or patient specimens

If yes, please provide a description below. Note that crossing any public road is considered shipping (i.e. this includes carrying samples to or from UT-MDACC).

Projected Start Date

This panel allows you to identify the projected start date and provide information if the study is being submitted as an ongoing renewal.

Goto Section [My Applications / Back](#)
 Display Options

Projected Start Date:
 Upon Approval
 Specific Date (if available):

 Additional Information:

 Ongoing (renewal)
 Previous protocol number:

Attach Documents

This panel allows you to attach any additional documents for your submission. Examples would include: a protocol, grant application or references.

Goto Section [My Applications / Back](#)
 Display Options

Please attach the following documents (if applicable):

1. Protocol
2. References
3. Other

- To attach a document, click on the **“Add a Document”** button.
- Press the **“Upload File”** button to find the file on your computer.
- Use the delete document to remove any document you may have uploaded in error.

Hit the "Upload File" button to up load the file.
 (only .jpg,.jpeg,.ppt,.pdf,.doc,.docx,.txt,.htm,.html,.bmp files allowed)

1.

- Follow the instructions on the next panel to locate and upload the document:

Hit the "Browse" button.

Choose the file on your computer that you want to upload.

Type in a custom description of the file, in the lower box, if you desire.

Then, hit "OK".

(only .jpg, .jpeg, .ppt, .pdf, .doc, .docx, .txt, .htm, .html, .bmp files allowed)

You may type a description of the document here:

Once a document is uploaded, the screen will look like this:

Add a Document

1. File "Guest account request form.doc" Uploaded. Submitted: 01/13/2009 16:18

Guest account request form.doc	<input type="button" value="Replace File"/>	<input type="button" value="Delete"/>
Special document for Barbara's testing	Download File	

- Use the **"Replace File"** or "Delete" options if necessary. You can also download the document if you need to view it before you submit your study.

When you are done completing the application, you will be returned to the Main Menu where all your studies will be listed.

Main Menu < BACK PI 490 O'Brien, John [Log Off](#)

Hide old modifications Show all modifications

— **Modifications:**

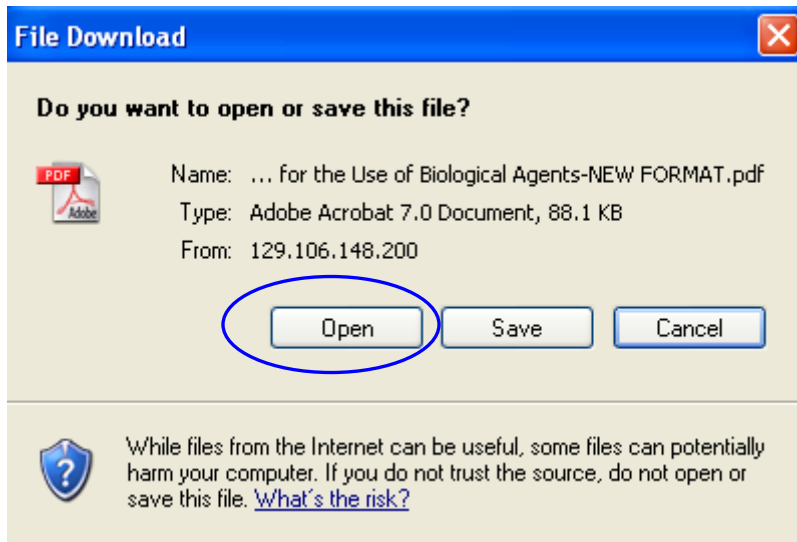
[Delete](#) **Permit #:** New
IBC/BSC #:
Project Title: "Regulation of Retinal Gap Junctions"

Mod. #	Application Type	Status	Modification Summary	Created
0	Initial	In Progress	Submit for Approval	01/13/2009

[Edit](#) [Delete](#) [Reports](#)

- Click on the **"Edit"** button to return to the application (if it has not been completed or submitted yet).
- Click on the **"Delete"** button if you want to delete the application and start over.
- Click on the **"Submit for Approval"** button if you are ready to submit the application to the BioSafety Office.
- Click on the **"Report"** button to see a copy of the Summary report for your submission.

Pressing the "Reports" button will open a dialog box:



- Select the “Open” button to view the report.

A multi-page report will appear:

01/13/2009 **Protocol Application for the Use of Biological Agents**
 Date First submitted: Date Last submitted:

PI Name: Dr. John O'Brien
Department: OPHT
Position: Associate Professor
Phone Number: 713-500-5983
Fax Number: 713-500-0883
Title: "Regulation of Retinal Gap Junctions"
Protocol Summary: Gap junctions are intercellular channels that allow passage of small molecules and electric current between cells. In neurons they form electrical synapses, a critical element of neural circuitry throughout the central nervous system that couples networks of neurons to allow rapid distribution of signals, synchronization of spikes, and support the development of oscillations. Coupling via electrical synapses is dynamically modulated by a number of signaling pathways and is a critical component of light adaptive changes in coupling in the retina.
 Dr. O'Brien's group is studying the signaling mechanisms that control gap junction coupling in the retina. The group is analyzing the protein kinase and protein phosphatase pathways that phosphorylate and de-phosphorylate retinal connexins, as well as regulation of these pathways by Ca²⁺-calmodulin. The work involves *in vitro* biochemical analyses of purified connexin proteins and fragments of connexins expressed in *E. coli* or in insect cells. Intact connexins and their mutants are expressed in mammalian or quail cell lines and evaluated by tracer coupling assays. These assays involve culturing cell lines expressing connexin constructs on glass coverslips, loading cells with a tracer (generally Neurobiotin) either by microinjection or by damaging some cells with a hypodermic needle ("scrape-loading"), and then fixing the coverslips and processing for fluorescence microscopy after allowing time for tracer diffusion. *E. coli* will be used for cloning, site-directed mutagenesis and protein expression.

<p>General Project Information <i>Purpose:</i> Initial</p> <p>Use of Human Subjects <i>Human subjects used:</i> No <i>CRIS Approval #</i> <i>CRIS Status:</i></p> <p>Biosafety Level/ rDNA Classification <i>BSL Level:</i> BSL-2 <i>M-A</i> <input type="checkbox"/> <i>M-B</i> <input type="checkbox"/> <i>M-C</i> <input type="checkbox"/> <i>M-D</i> <input checked="" type="checkbox"/> <i>M-E</i> <input type="checkbox"/></p>	<p>Protective Equipment Protective Equipment: The following standard personal protective equipment will be used: full length lab coats, disposable gloves, long pants, close-toed shoes, protective eyewear or face shields and disposable pipette tips. Please select all other applicable items from the following list and include locations and certification dates for biological safety cabinets <i>Safety centrifuge cups:</i> <input type="checkbox"/> <i>Sealed centrifuge rotors:</i> <input checked="" type="checkbox"/> <i>Biosafety Cabinet:</i> <input checked="" type="checkbox"/> <i>Date cabinet certification:</i> MSB 7.225 - certified through 04/09 <i>Respiratory protection:</i> <input type="checkbox"/></p>	<p>Projected Start Date <i>Upon Approval:</i> <input checked="" type="checkbox"/> <i>Date:</i> <i>Additional information:</i> <i>Ongoing renewal:</i> <input checked="" type="checkbox"/> <i>Previous protocol number:</i> IBC-03-026</p>
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- Use the scroll bars at the bottom of the page to move between the pages
- If you are ready to submit the application, press the “Submit for Approval” button.

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Hide old modifications Show all modifications

— **Modifications:**

[Delete](#) [Permit #:](#) New
 IBC/BSC #:
 Project Title: "Regulation of Retinal Gap Junctions"

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Edit	Delete	0	Initial	In Progress.		Submit for Approval	Reports	01/13/2009

The system will ask you to confirm the submission:

Are you sure you want to submit this application?
 If you would like to make additional changes to the application, click the "No" button.
 If you are finished filling out the application, and you would like to submit for approval, click the "Yes" button

If you return to the main page, you will see that the option to “**Submit for Approval**” is no longer available:

[Permit #:](#) New
 IBC/BSC #:
 Project Title: "Regulation of Retinal Gap Junctions"

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View		0	Initial	Submitted for Approval.			Reports	01/13/2009