Institutional Biosafety Committee Registration Form Tips: Teaching Protocols

Technical Tips

1. Always download the most current IBC Registration Form from the IBC website.
2. Do not edit the form in the browser. Instead, work on the downloaded form in the Microsoft desktop application.
3. When downloaded, the form is *Restricted for Editing* to the indicated fields, for user convenience. However, you may unlock the form to fully edit the document, if needed. No password is required. (See side bar for instructions.)

When completing the form…

1. Make sure to carefully read through the form and answer all applicable questions. Sections include a *N/A* checkbox if the section is not relevant to your project.
2. Please answer each question with a detailed explanation. Keep in mind that the IBC includes members of many disciplines; your description should be easily understood by all members and not just those in your area of study.
3. Include additional attachments or documents if it would be helpful to the committee to fully understand your project.
4. If you have questions as you are completing the form, contact an IBC member or the Office of Research Integrity (ORI) for help. It's easier and more efficient to address any questions regarding your registration before submission to the IBC.

Section-Specific Guidance

Section A: Basic Protocol Information

A2: List all faculty, key personnel, and university or grant supported student employees here. Students who are not paid research assistants do not need to be listed in the registration form for protocols. If you need to add more personnel than can fit, add an additional row to the table (see side bar) or attach a separate sheet. ORI will certify that appropriate CITI Training has been completed for all personnel listed on the Registration. **It is the Principal**

How to unlock the form and add additional rows to tables

For Windows:

To unlock the form: Select the *Review* tab. Then click on *Restrict Editing.* Select *Stop Protection* at the bottom of the menu.

To add a row: Now, right-click in a cell above where you wish to add a new row. Select *Insert* and then *Insert Rows Below*. Proceed with inserting additional personnel information.

For Mac:

To unlock the form: Go to *Tools* > *Protect Document*. Uncheck the box next to *Protect document for:* Finally, click *OK.*

To add a row: Right-click (or control-click using a single-button mouse) in a cell above where you wish to add a new row. Select *Insert* and then *Rows Below*. Proceed with inserting additional personnel information.

Investigator's responsibility to ensure that an up-to-date student participant list is kept on file with records of student CITI completions.

A6: Include room names and numbers where all activities (including prep, research, and disposal) occur.

Section C: Blood, Body Fluids, Tissues, & Biological Samples

C2: Example description drawn from approved Registration:

> *For two of the lab exercises we use TSA agar to which Sheep Blood has been added at 5%. This medium is purchased from media suppliers ready made in a sterile form. An example of the type of Blood Agar we purchase would be the Thermo Scientific, Remel, Blood Agar (Thermo Scientific, R02053), which has Certifications/Compliance from USDA, and APHIS. Students are not exposed to the blood in the medium.*

C3: Example description drawn from approved Registration:

> *As the Sheep Blood is incorporated directly into culture media that we buy from a supplier, and it is sterilized before it arrives here at UTC, there is no link between the blood and any students, technicians, or faculty. Thus, there is no need for any sort of containment plan, practice, or inactivation/decontamination procedure.*

IBC reviewers look for details about the safety of lab supplies that include blood or other potentially pathogenic substances. If the supplies are certified sterile and students will have no exposure to pathogens, please be sure to note these details.

Section D: Biological Agents

D1-D5: **Note: Responses are only required to the human/animal/plant checkboxes if BSL-2 hazards will be present. If more agents/toxins are involved than can be listed in the provided number of rows, add more rows (see side bar) or attach an additional sheet.

D6: Be sure to address all three parts of the question in your response – Design, Work Practices, and Containment Plan. IBC reviewers look for specific details that help them assess whether practices and plans are appropriate. It is often best to describe the activities and corresponding safety practices (PPE, disinfection/deactivation methods) in the sequence in which they will occur, e.g., from preparation through experimentation to disposal. Noting where activities will occur, e.g., on the benchtop or in a biological safety cabinet / laminar flow hood, is also advised.

Example description drawn from approved Registration:

> *All bacterial and fungal strains are non-pathogenic and considered non-hazardous. In this laboratory course, students will be working with live cultures during three exercises. The first involves serial dilution of instructor-prepared cultures followed by plating the bacteria on agar. During these 'microbiological' techniques no open flames (Bunsen burners) are used. The second exercise involves solvent extraction of phospholipids from bacteria (pelleted) already prepared by the instructor. The first step performed by students inactivates the bacteria (solvents) for ensuing biochemical applications. In other exercises, students will isolate plasmid and genomic DNA from instructor-provided bacterial cultures (in broth). Students will follow the kit-based extraction procedure by first centrifuging the cultures. The second step inactivates the bacteria. Protein extract will be prepared from Escherichia coli K-12 following heat lysing of bacteria. Students will quantify*

DNA and protein using spectrophotometric and colorimetric analyses, and gel electrophoresis of DNA and protein will be performed.

The laboratory space requires instructor key card access; thus, all work will be supervised. Students will be trained in standard BSL-1 practices (in addition to completing CITI biosafety training) and wear gloves and eye protection. All work will be performed on the benchtop using standard BSL-1 practices. Experiments are designed to minimize contact with organisms (e.g., cultures contained in flasks, test tubes, or enclosed agar plates). Pipettes and surfaces will be decontaminated using 70% ethanol and/or a 1:10 dilution of household bleach. Solid contaminated waste will be disposed of as biohazard waste (burn boxes) or autoclaved for at least 40 min. Liquid waste will be decontaminated with bleach or autoclaved for at least 40 min.

Section G: Recombinant DNA

III-E Miscellaneous – Other category: This is a catch-all for rDNA activities that are not exempt (see Section H for exemption categories) but also not in one of the higher-risk categories (A-D), nor specified elsewhere in category III-E. If you determine that specific activities do not qualify as exempt, but also do not fit in any of the above categories, this box should be checked.

Supplemental Questions: This has limited applicability – pay close attention to the "skip" instructions.

Section H: Determination of Exemption from *NIH Guidelines* and IBC Review

Complete this section only if your project involves recombinant DNA or synthetic nucleic acids, and you have NOT checked a box in Section G: Recombinant DNA.