

# Checklist for Adult Sponsor (1)

This completed form is required for ALL projects.

To be completed by the Adult Sponsor in collaboration with the student researcher(s):

Student's Name(s): \_\_\_\_\_

Project Title: \_\_\_\_\_

- 1)  I have reviewed the Intel ISEF Rules and Guidelines.
- 2)  I have reviewed the student's completed Student Checklist (1A) and Research Plan.
- 3)  I have worked with the student and we have discussed the possible risks involved in the project.
- 4)  The project involves one or more of the following and requires prior approval by an SRC, IRB, IACUC or IBC:
  - Humans
  - Potentially Hazardous Biological Agents
  - Vertebrate Animals
  - Microorganisms
  - rDNA
  - Tissues
- 5)  Items to be completed for **ALL PROJECTS**
  - Adult Sponsor Checklist (1)
  - Research Plan
  - Student Checklist (1A)
  - Approval Form (1B)
  - Regulated Research Institutional/Industrial Setting Form (1C) (when applicable after completed experiment)
  - Continuation/Research Progression Form (7) (when applicable)
- 6) **Additional forms required if the project includes the use of one or more of the following** (check all that apply):
  - Humans** (Requires prior approval by an Institutional Review Board (IRB); see full text of the rules.)
    - Human Participants Form (4) or appropriate Institutional IRB documentation
    - Sample of Informed Consent Form (when applicable and/or required by the IRB)
    - Qualified Scientist Form (2) (when applicable and/or required by the IRB)
  - Vertebrate Animals** (Requires prior approval, see full text of the rules.)
    - Vertebrate Animal Form (5A)—for projects conducted in a school/home/field research site (SRC prior approval required.)
    - Vertebrate Animal Form (5B)—for projects conducted at a Regulated Research Institution. (Institutional Animal Care and Use Committee (IACUC) approval required prior experimentation.)
    - Qualified Scientist Form (2) (Required for all vertebrate animal projects at a regulated research site or when applicable)
  - Potentially Hazardous Biological Agents** (Requires prior approval by SRC, IACUC or Institutional Biosafety Committee (IBC), see full text of the rules.)
    - Potentially Hazardous Biological Agents Risk Assessment Form (6A)
    - Human and Vertebrate Animal Tissue Form (6B)—to be completed in addition to Form 6A when project involves the use of fresh or frozen tissue, primary cell cultures, blood, blood products and body fluids.
    - Qualified Scientist Form (2) (when applicable)
    - Risk Assessment Form (3) required for projects involving protists, archae and similar microorganisms, for projects using manure for composting, fuel production or other non-culturing experiments, for projects using color change coliform water test kits, microbial fuel cells, and for projects involving decomposing vertebrate organisms
  - Hazardous Chemicals, Activities and Devices** (No prior approval required, see full text of the rules.)
    - Risk Assessment Form (3)
    - Qualified Scientist Form (2) (required for projects involving DEA-controlled substances or when applicable)

\_\_\_\_\_  
Adult Sponsor's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Review

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Email

## Student Checklist (1A)

This form is required for ALL projects.

1) a. Student/Team Leader: \_\_\_\_\_ Grade: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

b. Team Member: \_\_\_\_\_ c. Team Member: \_\_\_\_\_

2) Title of Project: \_\_\_\_\_

3) School: \_\_\_\_\_ School Phone: \_\_\_\_\_

School Address: \_\_\_\_\_

4) Adult Sponsor: \_\_\_\_\_ Phone/Email: \_\_\_\_\_

5) Is this a continuation/progression from a previous year?  Yes  No

If Yes:

a) Attach the previous year's  Abstract and  Research Plan

b) Explain how this project is new and different from previous years on  Continuation/Research Progression Form (7)

6) This year's laboratory experiment/data collection: (must be stated (mm/dd/yy))

\_\_\_\_\_ Start Date: (mm/dd/yy)

\_\_\_\_\_ End Date: (mm/dd/yy)

7) Where will you conduct your experimentation? (check all that apply)

Research Institution  School  Field  Home  Other: \_\_\_\_\_

8) List name and address of all non-school work site(s):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

9) Complete a Research Plan following the Research Plan instructions and attach to this form.

10) An abstract is required for all projects after experimentation.

# Research Plan Instructions (complete)

A complete research plan is required and must accompany Checklist for Student (1A)

Provide a typed research plan and attach to Student Checklist (1A). Please include your name on each page. The research plan for ALL projects is to include the following:

**A. Question or Problem being addressed**

**B. Goals/Expected Outcomes/Hypotheses**

**C. Description in detail of method or procedures** (The following are important and key items that should be included when formulating ANY AND ALL research plans.)

- **Procedures:** Detail all procedures and experimental design to be used for data collection
- **Risk and Safety:** Identify any potential risks and safety precautions to be taken.
- **Data Analysis:** Describe the procedures you will use to analyze the data/results that answer research questions or hypotheses

**D. Bibliography:** List at least five (5) major references (e.g. science journal articles, books, internet sites) from your literature review. If you plan to use vertebrate animals, one of these references must be an animal care reference.

- Choose one style and use it consistently to reference the literature used in the research plan
- Guidelines can be found in the Student Handbook

Items 1–4 below are subject-specific guidelines for additional items to be included in your research plan as applicable:

**1. Human participants research:**

- **Participants.** Describe who will participate in your study (age range, gender, racial/ethnic composition). Identify any vulnerable populations (minors, pregnant women, prisoners, mentally disabled or economically disadvantaged).
- **Recruitment.** Where will you find your participants? How will they be invited to participate?
- **Methods.** What will participants be asked to do? Will you use any surveys, questionnaires or tests? What is the frequency and length of time involved for each subject?
- **Risk Assessment**
  - **Risks.** What are the risks or potential discomforts (physical, psychological, time involved, social, legal, etc.) to participants? How will you minimize the risks?
  - **Benefits.** List any benefits to society or each participant.
- **Protection of Privacy.** Will any identifiable information (e.g., names, telephone numbers, birth dates, email addresses) be collected? Will data be confidential or anonymous? If anonymous, describe how the data will be collected anonymously. If not anonymous, what procedures are in place for safeguarding confidentiality? Where will the data be stored? Who will have access to the data? What will you do with the data at the end of the study?
- **Informed Consent Process.** Describe how you will inform participants about the purpose of the study, what they will be asked to do, that their participation is voluntary and they have the right to stop at any time.

**2. Vertebrate animal research:**

- Briefly discuss potential **ALTERNATIVES** to vertebrate animal use and present a detailed justification for use of vertebrate animals
- Explain potential impact or contribution this research may have
- Detail all procedures to be used
  - Include methods used to minimize potential discomfort, distress, pain and injury to the animals during the course of experimentation
  - Detailed chemical concentrations and drug dosages
- Detail animal numbers, species, strain, sex, age, source, etc.
  - Include justification of the numbers planned for the research
- Describe housing and oversight of daily care
- Discuss disposition of the animals at the termination of the study

**3. Potentially Hazardous Biological Agents:**

- Describe Biosafety Level Assessment process and resultant BSL determination
- Give source of agent, source of specific cell line, etc.
- Detail safety precautions
- Discuss methods of disposal

**4. Hazardous Chemicals, Activities & Devices:**

- Describe Risk Assessment process and results
- Detail chemical concentrations and drug dosages
- Describe safety precautions and procedures to minimize risk
- Discuss methods of disposal

# Approval Form (1B)

A completed form is required for each student, including all team members.

## 1) To Be Completed by Student and Parent

### a) Student Acknowledgment:

- I understand the risks and possible dangers to me of the proposed research plan.
- I have read the Intel ISEF Rules and Guidelines and will adhere to all International Rules when conducting this research.
- I have read and will abide by the following Ethics statement

Scientific fraud and misconduct are not condoned at any level of research or competition. Such practices include plagiarism, forgery, use or presentation of other researcher's work as one's own, and fabrication of data. Fraudulent projects will fail to qualify for competition in affiliated fairs and the Intel ISEF.

\_\_\_\_\_  
Student's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date Acknowledged (mm/dd/yy)  
(Must be prior to experimentation.)

**b) Parent/Guardian Approval:** I have read and understand the risks and possible dangers involved in the **Research Plan**. I consent to my child participating in this research.

\_\_\_\_\_  
Parent/Guardian's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date Acknowledged (mm/dd/yy)  
(Must be prior to experimentation.)

## 2) To be completed by the local or affiliated Fair SRC

(Required for projects requiring prior SRC/IRB APPROVAL. Sign 2a or 2b as appropriate.)

**a) Required for projects that need prior SRC/IRB approval BEFORE experimentation**  
(humans, vertebrates or potentially hazardous biological agents)

The SRC/IRB has carefully studied this project's **Research Plan** and all the required forms are included. My signature indicates approval of the **Research Plan** before the student begins experimentation.

\_\_\_\_\_  
SRC/IRB Chair's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval (mm/dd/yy)  
(Must be prior to experimentation.)

OR

**b) Required for research conducted at all Regulated Research Institutions with no prior fair SRC/IRB approval.**

This project was conducted at a regulated research institution (**not home or high school, etc.**), was reviewed and approved by the proper institutional board before experimentation and complies with the Intel ISEF Rules. **Attach (1C) and required institutional approvals (e.g. IACUC, IRB).**

\_\_\_\_\_  
SRC Chair's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval (mm/dd/yy)

## 3) Final Intel ISEF Affiliated Fair SRC Approval (Required for ALL Projects)

### SRC Approval After Experimentation and Before Competition at Regional/State/National Fair

I certify that this project adheres to the approved **Research Plan** and complies with all Intel ISEF Rules.

\_\_\_\_\_  
Regional SRC Chair's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval

\_\_\_\_\_  
State/National SRC Chair's Printed Name  
(where applicable)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval

# Regulated Research Institutional/Industrial Setting Form (1C)

This form must be completed AFTER experimentation by the adult supervising the student research conducted in a regulated research institution, industrial setting or any work site other than home, school or field.

This form MUST be displayed with your project; responses must be on the form.

Student's Name(s) \_\_\_\_\_

Title of Project \_\_\_\_\_

## To be completed by the Supervising Adult in the Setting (NOT the Student(s)) after experimentation:

(Responses must remain on the form as it is required to be displayed at student's project booth.)

The student(s) conducted research at my work site:

a)  to use the equipment                      b)  to perform experiment(s)/conduct research

1) Is this research a subset of your work?                       Yes     No

2) Have you reviewed the Intel ISEF rules relevant to this project?                       Yes     No

3) How did the student get the idea for her/his project?  
(e.g. Was the project assigned, picked from a list, an original student idea, etc.)

4) Did the student(s) work on the project as a part of a research group?                       Yes     No  
If yes, how large was the group and what kind of research group was it (students, group of adult researchers, etc.)

5) What specific procedures or equipment did the student(s) actually use for the project?  
Please list and describe. (Do not list procedures student only observed.)

6) How independent or creative was the student's/students' work?

*Student research projects dealing with human participants, vertebrate animals or potentially hazardous biological agents require review and approval by an institutional regulatory board (IRB/IACUC/IBC). **Copy of approval(s) must be attached, if applicable.***

\_\_\_\_\_  
Supervising Adult's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Institution

\_\_\_\_\_  
Date Signed (must be after experimentation)

\_\_\_\_\_  
Address

\_\_\_\_\_  
Email/Phone

## Qualified Scientist Form (2)

May be required for research involving human participants, vertebrate animals, potentially hazardous biological agents, and DEA-controlled substances. Must be completed and signed before the start of student experimentation.

Student's Name(s) \_\_\_\_\_

Title of Project \_\_\_\_\_

### To be completed by the Qualified Scientist:

Scientist Name: \_\_\_\_\_

Educational Background: \_\_\_\_\_ Degree(s): \_\_\_\_\_

Experience/Training as relates to the student's area of research: \_\_\_\_\_

Position: \_\_\_\_\_ Institution: \_\_\_\_\_

Address: \_\_\_\_\_ Email/Phone: \_\_\_\_\_

- 1) Have you reviewed the Intel ISEF rules relevant to this project?  Yes  No
- 2) Will any of the following be used?
- a) Human participants  Yes  No
  - b) Vertebrate animals  Yes  No
  - c) Potentially hazardous biological agents (microorganisms, rDNA and tissues, including blood and blood products)  Yes  No
  - d) DEA-controlled substances  Yes  No
- 3) Was this study a sub-set of a larger study?  Yes  No
- 4) Will you directly supervise the student?  Yes  No
- a) If no, who will directly supervise and serve as the Designated Supervisor? \_\_\_\_\_
- b) Experience/Training of the Designated Supervisor: \_\_\_\_\_

#### To be completed by the Qualified Scientist:

I certify that I have reviewed and approved the Research Plan prior to the start of the experimentation. If the student or Designated Supervisor is not trained in the necessary procedures, I will ensure her/his training. I will provide advice and supervision during the research. I have a working knowledge of the techniques to be used by the student in the Research Plan. I understand that a Designated Supervisor is required when the student is not conducting experimentation under my direct supervision.

\_\_\_\_\_  
Qualified Scientist's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval

#### To be completed by the Designated Supervisor when the Qualified Scientist cannot directly supervise.

I certify that I have reviewed the Research Plan and have been trained in the techniques to be used by this student, and I will provide direct supervision.

\_\_\_\_\_  
Designated Supervisor's Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Approval

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Email

## Potentially Hazardous Biological Agents Risk Assessment Form (6A)

Required for research involving microorganisms, rDNA, fresh/frozen tissue (including primary cell lines, human and other primate established cell lines and tissue cultures), blood, blood products and body fluids.  
SRC/IACUC/IBC approval required before experimentation.

Student's Name(s) \_\_\_\_\_

Title of Project \_\_\_\_\_

**To be completed by Student Researcher(s) in collaboration with Qualified Scientist/Designated Supervisor:**  
(All questions are applicable and must be answered; additional page(s) may be attached.)

1. Identify potentially hazardous biological agents to be used in this experiment. Include the source, quantity and the biosafety level risk group of each microorganism.
2. Describe the site of experimentation including the level of biological containment.
3. Describe the procedures that will be used to minimize risk. (personal protective equip., hood type, etc.)
4. What final biosafety level do you recommend for this project given the risk assessment you conducted?
5. Describe the method of disposal of all cultured materials and other potentially hazardous biological agents.

### To be completed by Qualified Scientist or Designated Supervisor

1. What training will the student receive for this project?
2. Do you concur with the biosafety information and recommendation provided by the student researcher above?  
 Yes    No If no, please explain.
3. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable)

\_\_\_\_\_  
QS/DS Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date of Signature (mm/dd/yy)

### To be completed by Local or Affiliate Fair SRC: (Check all that apply.)

- The SRC has carefully studied this project's Research Plan and the risk level assessment above **prior to experimentation** and approves this study as a BSL-1 study, which must be conducted at a BSL-1 or above laboratory.  
Date of SRC approval (prior to experimentation) \_\_\_\_\_
- The SRC has carefully studied this project's Research Plan and the risk level assessment above **prior to experimentation** and approves this study as a BSL-2 study, which must be conducted at a BSL-2 or above laboratory.  
Date of SRC approval (prior to experimentation) \_\_\_\_\_
- This project was conducted at a Research Institution and was reviewed and approved by the appropriate institutional board (e.g. IACUC, IBC) before experimentation at a BSL-1 or BSL-2 laboratory and complies with the Intel ISEF rules. The required institutional forms are attached.  
Date of SRC approval (after experimentation) \_\_\_\_\_
- The Research Institution where this study was conducted does not require approval for this type of study. The student has received proper training and the project complies with Intel ISEF rules. Attached is institutional documentation certifying the above.  
Date of SRC approval \_\_\_\_\_

\_\_\_\_\_  
SRC Chair's Printed Name

\_\_\_\_\_  
Signature