## 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)  $\Box$  I have reviewed the Intel ISEF Rules and Guidelines.
- 2)  $\Box$  I have reviewed the student's completed Student Checklist (1A) and Research Plan.
- 3)  $\Box$  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
  - Vertebrate Animals

- Potentially Hazardous Biological Agents
- □ Microorganisms □ rDNA □ Tissues
- - Adult Sponsor Checklist (1)
  - □ Student Checklist (1A)

- Research Plan
- □ 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.)
    - D 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

# **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? If Yes:	□ Yes □ No
a) Attach the previous year's $\ \square$ Abstract and $\ \square$	
b) Explain how this project is new and different from pre Form (7)	vious years on 🛛 Continuation/Research Progression
6) This year's laboratory experiment/data collection: (must be	e 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)
$\Box$ Research Institution $\Box$ School $\Box$ 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.

## 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:

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- 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.			
<ol> <li>To Be Completed by Student and Parent         <ul> <li>a) Student Acknowledgment:</li> <li>I understand the risks and possible dangers to me of the proposed research plan.</li> <li>I have read the Intel ISEF Rules and Guidelines and will adhere to all International Rules when conducting this research.</li> <li>I have read and will abide by the following Ethics statement</li> </ul> </li> <li>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.</li> </ol>			
Fraudulent projects will fail to qualify for competition in affiliated fairs and the Intel ISEF.         Student's Printed Name       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 (Required for projects requiring prior SRC/IRB APPR			
<ul> <li>a) Required for projects that need prior SRC/IRB approval BEFORE experimentation (humans, vertebrates or potentially hazardous biological agents)</li> <li>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.</li> </ul>	<ul> <li>b) Required for research conducted at all Regulate Research Institutions with no prior fair SRC/IRB approval.</li> <li>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).</li> </ul>		
SRC/IRB Chair's Printed Name	SRC Chair's Printed Name		
Signature     Date of Approval (mm/dd/yy) (Must be prior to experimentation.)	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 <b>Research Plan</b> 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	

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	This form MUST be displ	layed with your project; resp	ponses must	be on the form.
Stı	udent's Name(s)			
Гit	tle of Project			
	<b>be completed by the Supervising</b> Responses must remain on the form as it	• •	• •	•
The	e student(s) conducted research at my v	work site:		
a)	$\Box$ to use the equipment by	) $\Box$ to perform experiment(s)/co	onduct researc	:h
1)	Is this research a subset of your work?	?	□ Yes	□ No
2)	Have you reviewed the Intel ISEF rules	s relevant to this project?	□ Yes	□ No
3)	How did the student get the idea for h (e.g. Was the project assigned, picked t		lea, etc.)	
4)	Did the student(s) work on the project If yes, how large was the group and w			
5)	What specific procedures or equipmen Please list and describe. (Do not list pr			ct?
6)	How independent or creative was the	student's/students' work?		
	Student research projects dealing with agents require review and approval by <b>must be attached, if applicable.</b>			
	Supervising Adult's Printed Name	Signature		Title
	Institution		Date	e Signed (must be after experimentatio

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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: Experience/Training as relates to the student's area of resear		
Position: Institutio	on:	
Address: Email/F	<sup>2</sup> hone:	
1) Have you reviewed the Intel ISEF rules relevant to this pro		es 🗆 No
<ul> <li>2) Will any of the following be used?</li> <li>a) Human participants</li> <li>b) Vertebrate animals</li> <li>c) Potentially hazardous biological agents (microorganism including blood and blood products)</li> <li>d) DEA-controlled substances</li> </ul>	□ Ye □ Ye ns, rDNA and tissues, □ Ye □ Ye	es 🗆 No es 🗆 No
3) Was this study a sub-set of a larger study?		es 🗆 No
<ul> <li>4) Will you directly supervise the student?</li> <li>a) If no, who will directly supervise and serve as the Des</li> <li>b) Experience/Training of the Designated Supervisor:</li> </ul>	☐ Ye	
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	To be completed by the De when the Qualified Scient supervise. I certify that I have reviewed the been trained in the techniques t and I will provide direct supervise	ist cannot directly e Research Plan and have o be used by this student,

Designated Supervisor's Printed Name

Signature

Date of Approval

Phone

Email

Signature

Date of Approval

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.

**Oualified Scientist's Printed Name** 

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## **Risk Assessment Form** (3)

Required for projects using hazardous chemicals, activities or devices and microorganisms exempt from pre-approval. Must be completed before experimentation.

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

Title of Project

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

- 1. List/identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules), and all hazardous chemicals, activities, or devices that will be used.
- 2. Identify and assess the risks involved in this project.
- 3. Describe the safety precautions and procedures that will be used to reduce the risks.
- 4. Describe the disposal procedures that will be used (when applicable).
- 5. List the source(s) of safety information.

To be completed and signed by the Designated Supervisor (or Qualified Scientist, when applicable): I agree with the risk assessment and safety precautions and procedures described above. I certify that I have reviewed the Research Plan and will provide direct supervision.			
Designated Supervisor's Printed Name	Signature		Date of Review (mm/dd/yy)
Position & Institution		Phone or email conta	act information
Experience/Training as relates to the student's area of research			