Science Fair Paperwork and SRC/IRB Tips

Fall 2016

Adult Roles and Responsibilities

- Several adults can and should help students with their scientific research:
  - Adult Sponsor
  - Qualified Scientist
  - Designated Supervisor
  - Institutional Review Board (IRB)
  - Scientific Review Committee (SRC)

  - Consult the Intel ISEF Rules & Guidelines pages 5 & 6 for detailed descriptions.

Adult Sponsor

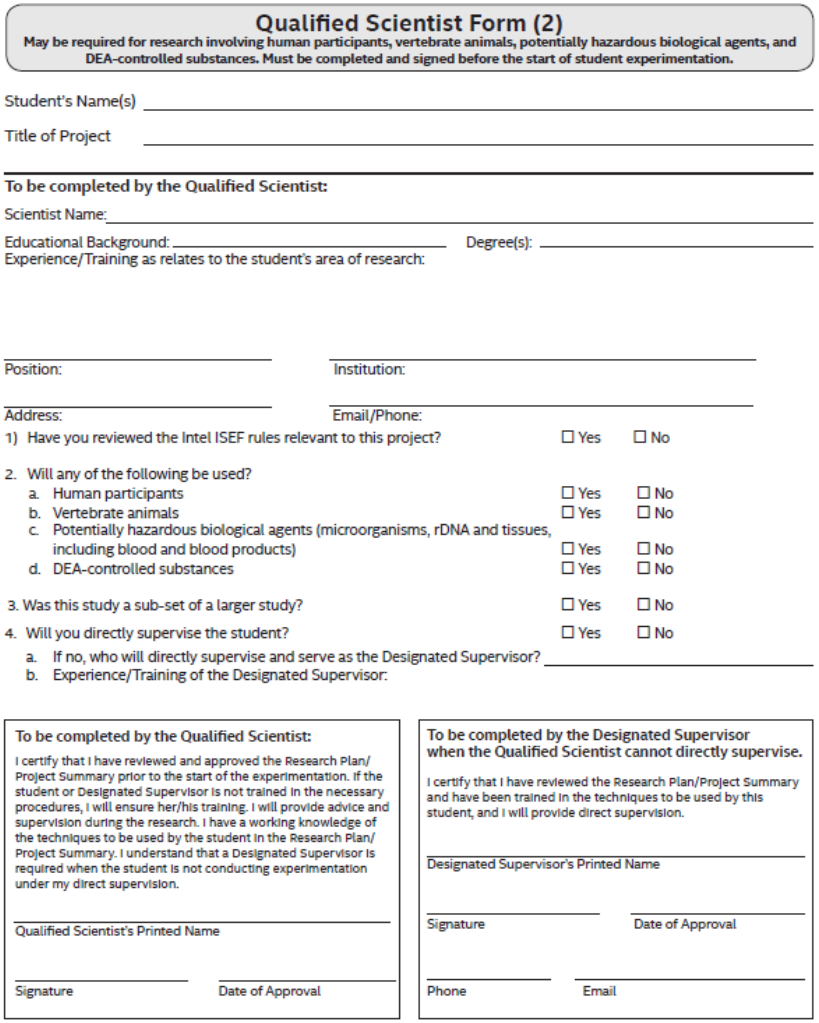
- Oversees project to make sure that student…
  - is informed of ISEF Rules and Guidelines
  - is aware of risks associated with project
  - is aware of forms required for project
  - is provided proper supervision during experimentation
  - if required, submits project to IRB or SRC
- Teacher usually serves as Adult Sponsor

Qualified Scientist

- Required for **some** projects
- Completes Form 2 – QS Form
- Should have a doctoral or professional degree related to student research

Or

Have applicable experience and expertise with review and approval by the SRC



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/Project Summary 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/Project Summary. 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/Project Summary 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 _____

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Designated Supervisor

- Supervises projects involving hazardous chemicals, activities or devices
- Supervises projects requiring a Qualified Scientist when the Qualified Scientist cannot directly supervise the student
- For vertebrate animal projects, an Animal Care Supervisor is required

What is an SRC/IRB?

- SRC stands for Scientific Review Committee
  - A group of knowledgeable individuals who review **all** student research projects prior to competition and **some** student research projects before experimentation.
- IRB stands for Institutional Review Board
  - A group of knowledgeable individuals who review **all** student research involving human participants prior to experimentation.
- Combined SRC/IRB (**We have this in WY.**)
  - A group of 4 knowledgeable individuals that evaluate all projects include those using human participants.

Why have a State Science Fair SRC/IRB?

- Encourage and teach students how to do safe, legal, and ethical research.
- Prevent problems before competition and sometimes even before experimentation.
- Continue to send students to Intel ISEF and Broadcom MASTERS (it is part of the rules).

Common Paperwork Problems

At Regional Fairs

- Incomplete or late paperwork
- Missing human participant Form 4 and Human Informed Consent
- No differentiation between qualified scientist and designated supervisor
- Inappropriate or unsafe handling of potentially hazardous biologic agents
- Failure to provide paperwork for continuing projects

At the Intel ISEF

- No SRC approval or insufficient research plan for vertebrate animal projects
- Human projects without prior approval or consent forms
- Inadequate information for projects culturing potentially-pathogenic agents
- Continuation projects with inadequate information to document progress
- Eligibility questions – ages of students, number of team members, length of research, and scientific conduct

SRC/IRB Review Timeline

- Selected projects are reviewed prior to the start of experimentation:
  - Human Subjects
  - Vertebrate Animals
  - Potentially Hazardous Biological Agents

Dates on the paperwork must reflect this.

This is a golden opportunity to give students advice on how to revise projects to make them safer or more ethical.

SRC/IRB Review Timeline

- All projects are reviewed after experimentation and prior to competition.
- During this review, the SRC/IRB is looking for compliance with Intel ISEF Rules & Guidelines.

Rules are designed to "ensure the safety of students, to protect the participants and environments studied and to limit the liability of the adults who assist with the projects."

Students, adults and fair leadership should all become familiar with these Intel ISEF Rules & Guidelines.

SRC/IRB Review Timeline

- SRC/IRB review prior to experimentation should result in one of the following decisions:
  - **Approval** – SRC/IRB chair signs box 2a or 2b on Form 1B
  - **Disapproval** – SRC/IRB chair provides student and sponsor with reasons for disapproval and suggestions for corrections needed for approval. (These projects require re-review after corrections are made.)
- SRC/IRB review after experimentation and shortly before competition:
  - A signature at the bottom of Form 1B indicates project complies with all Intel ISEF Rules & Guidelines and is approved for competition.

SRC/IRB Review Checklist

- Intel ISEF publishes a full checklist for SRC/IRBs to use when reviewing projects after experimentation:

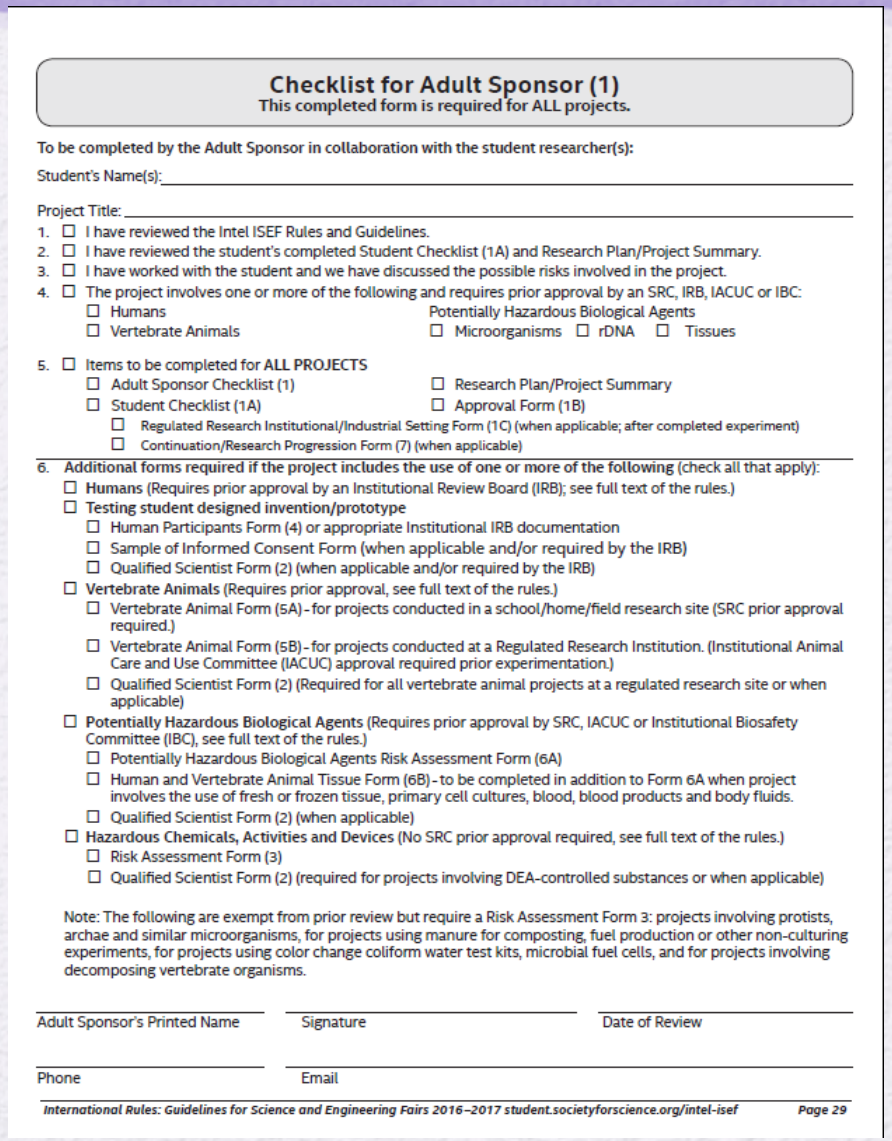
https://student.societyforscience.org/checklist-src-review

SRC/IRB Review Checklist Highlights

- Abstract:
  - Review the abstract and look for evidence of human participants (Form 4), animals (Forms 5A or 5B), potentially hazardous biological agents (Forms 6A or 6B), work done at a regulated research institution (Form 1C), a continuation study (Form 7), hazardous chemicals or devices (Form 3).
- Wyoming State Science Fair (WSSF) does not require abstracts to be on the ISEF Form (no boxes to check).
  - WSSF guidelines for writing abstracts are available at http://www.uwyo.edu/sciencefair/important-information.html

SRC/IRB Review Checklist

- Checklist for Adult Sponsor (Form 1)
  - Look for consistency in answers and forms



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/Project Summary.
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
   - ☐ Vertebrate Animals
   - Potentially Hazardous Biological Agents
     - ☐ Microorganisms ☐ rDNA ☐ Tissues
5. ☐ Items to be completed for **ALL PROJECTS**
   - ☐ Adult Sponsor Checklist (1)
   - ☐ Student Checklist (1A)
   - ☐ Research Plan/Project Summary
   - ☐ 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.)
   - ☐ **Testing student designed invention/prototype**
     - ☐ 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)
   - ☐ **Hazardous Chemicals, Activities and Devices** (No SRC 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)

Note: The following are exempt from prior review but require a Risk Assessment Form 3: 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.

Adult Sponsor's Printed Name _____ Signature _____ Date of Review _____

Phone _____ Email _____

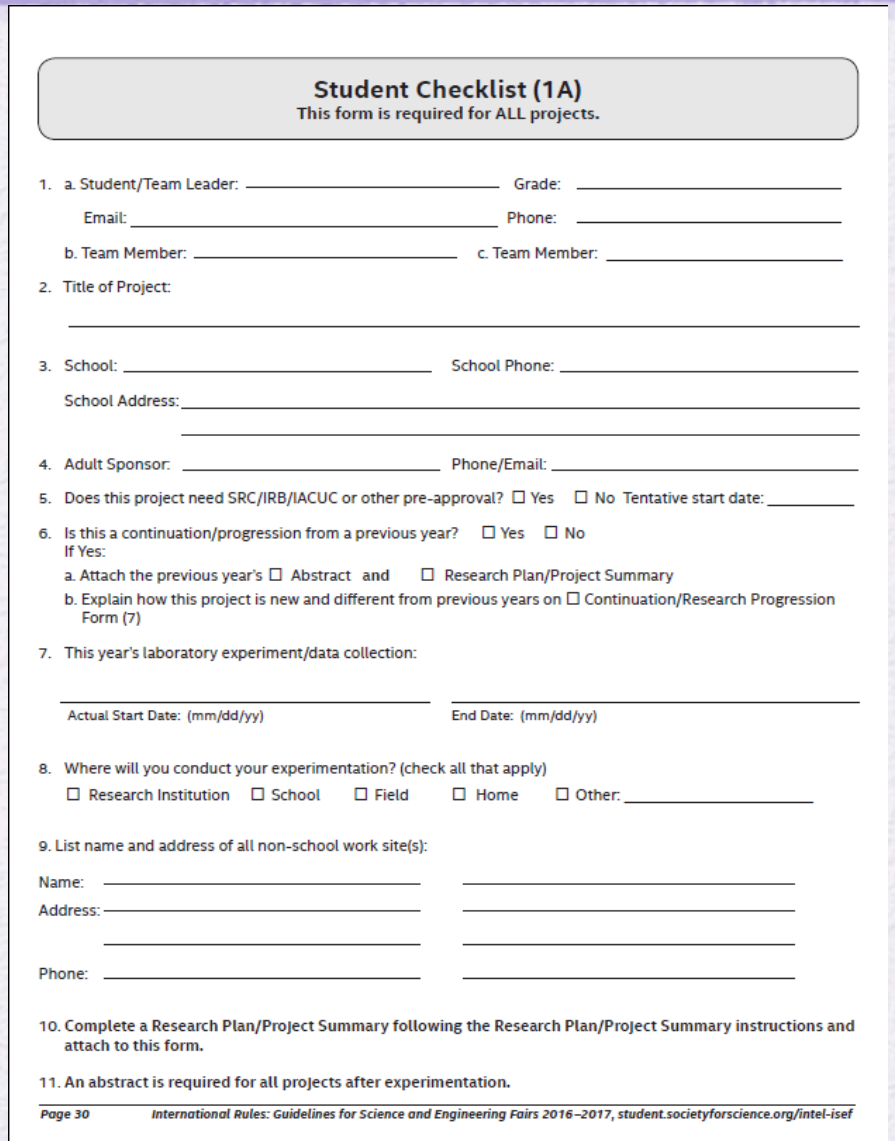
SRC/IRB Review Checklist

- Research Plan & Post Project Summary
  - This document contains most of the critical information needed to determine approval.
  - Contact the student or adult sponsor if more information is needed.

  - WSSF research plan guidelines are available at http://www.uwyo.edu/sciencefair/important-information.html

SRC/IRB Review Checklist

- Student Checklist (Form 1A)
  - Item 7 – look at these dates carefully and make sure that SRC/IRB pre-approval was granted prior to "actual start date", and that the study period was no more than 12 months beginning in January.



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. Does this project need SRC/IRB/IACUC or other pre-approval? ☐ Yes ☐ No Tentative start date: _____
6. Is this a continuation/progression from a previous year? ☐ Yes ☐ No
   If Yes:
   a. Attach the previous year's ☐ Abstract and ☐ Research Plan/Project Summary
   b. Explain how this project is new and different from previous years on ☐ Continuation/Research Progression Form (7)
7. This year's laboratory experiment/data collection:
   _____ _____
   Actual Start Date: (mm/dd/yy) End Date: (mm/dd/yy)
8. Where will you conduct your experimentation? (check all that apply)
   ☐ Research Institution ☐ School ☐ Field ☐ Home ☐ Other: _____
9. List name and address of all non-school work site(s):
   Name: _____ _____
   Address: _____ _____
   _____ _____
   Phone: _____ _____
10. **Complete a Research Plan/Project Summary following the Research Plan/Project Summary instructions and attach to this form.**
11. **An abstract is required for all projects after experimentation.**

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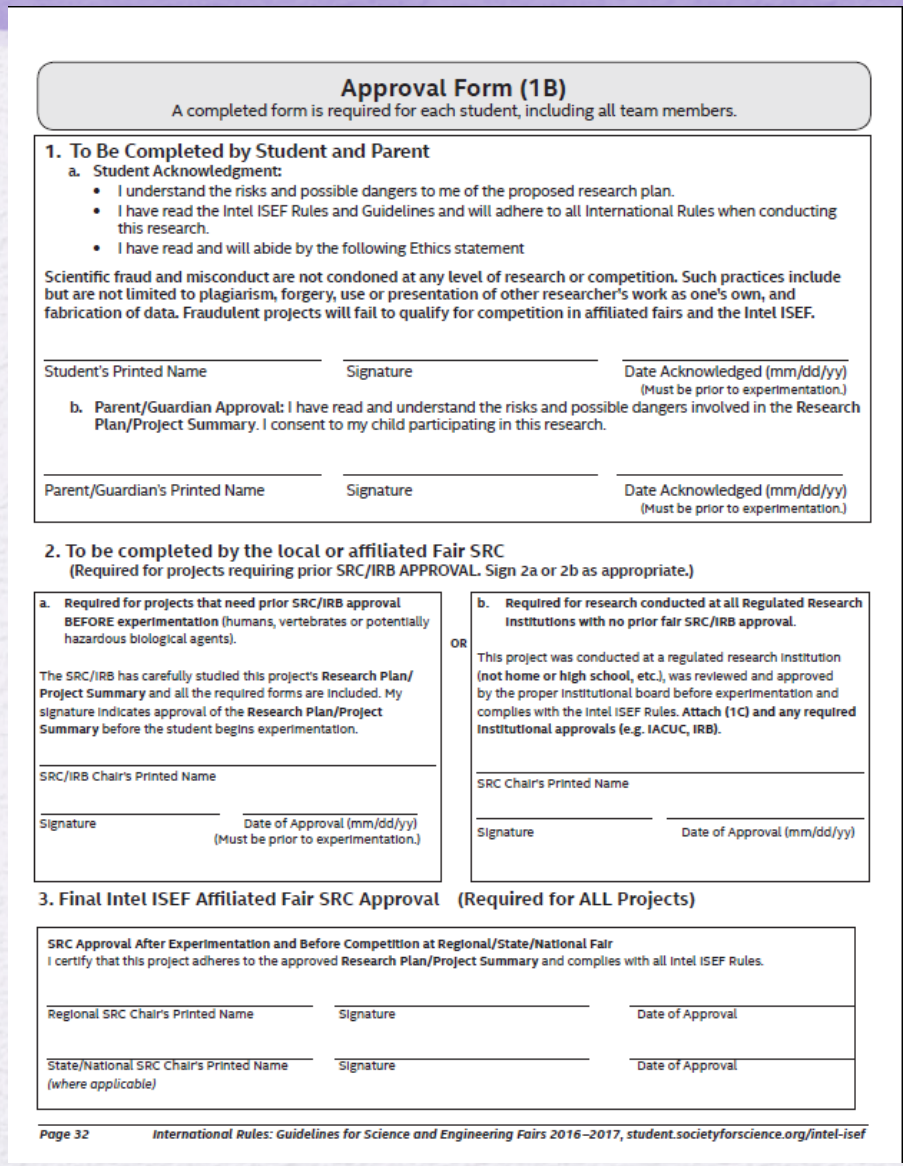
SRC/IRB Review Checklist

- Approval Form (Form 1B)
  - Student and parent signatures must be before the "actual start date" on Form 1A.
  - Pre-approval is indicated by the SRC Chair's signature in #2a or #2b.
  - Post-approval (approval for competition) is indicated by SRC Chair's signature in #3. Date should be shortly prior to the fair event and after the "actual end date" indicated on Form 1A.



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 but are not limited to 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/Project Summary**. 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/Project Summary** and all the required forms are included. My signature indicates approval of the **Research Plan/Project Summary** 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 any 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/Project Summary** 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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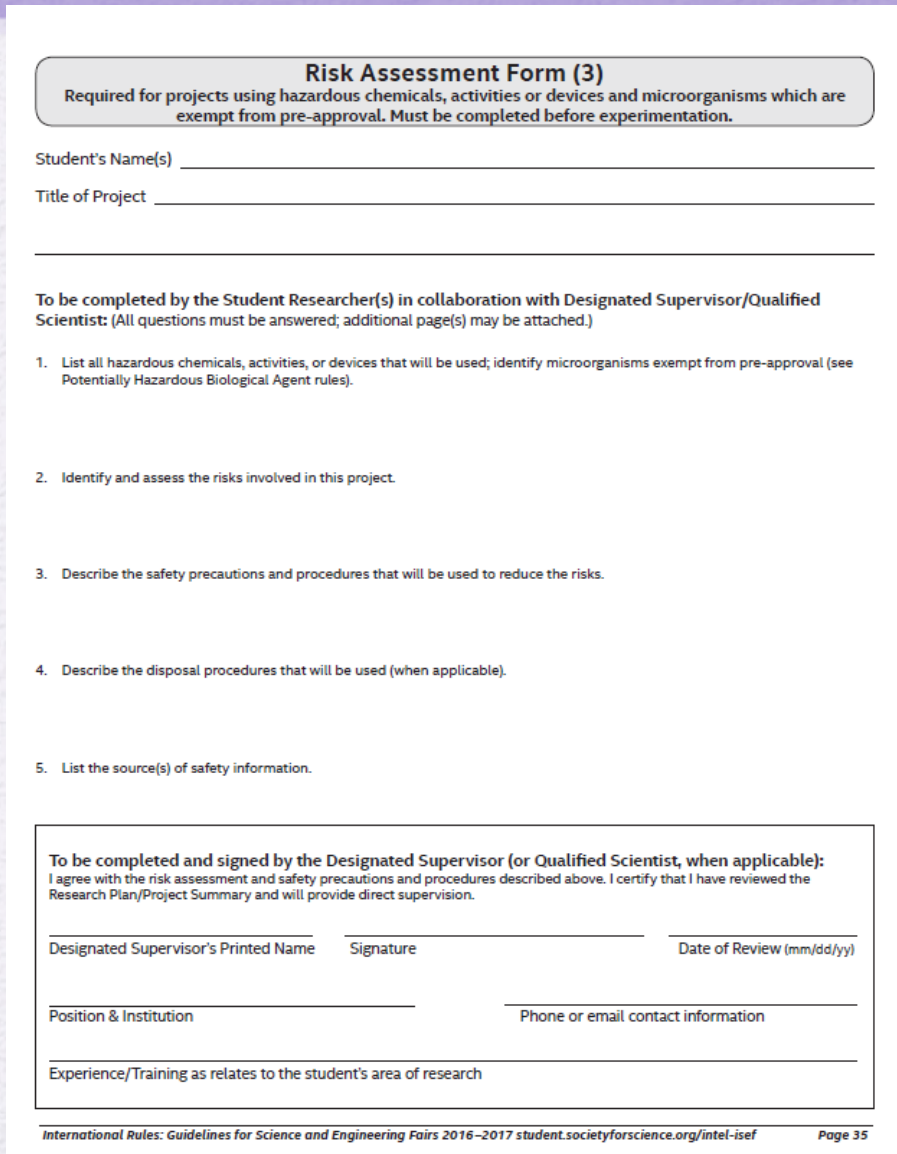
SRC/IRB Review Checklist

- Risk Assessment (Form 3)
  - This should be completed before experimentation.
  - WY students tend to underestimate risks.
  - If in doubt, it is best to complete this form.



Risk Assessment Form (3)

Required for projects using hazardous chemicals, activities or devices and microorganisms which are 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 all hazardous chemicals, activities, or devices that will be used; identify microorganisms exempt from pre-approval (see Potentially Hazardous Biological Agent rules).

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/Project Summary and will provide direct supervision.

Designated Supervisor's Printed Name _____ Signature _____ Date of Review (mm/dd/yy) _____

Position & Institution _____ Phone or email contact information _____

Experience/Training as relates to the student's area of research _____

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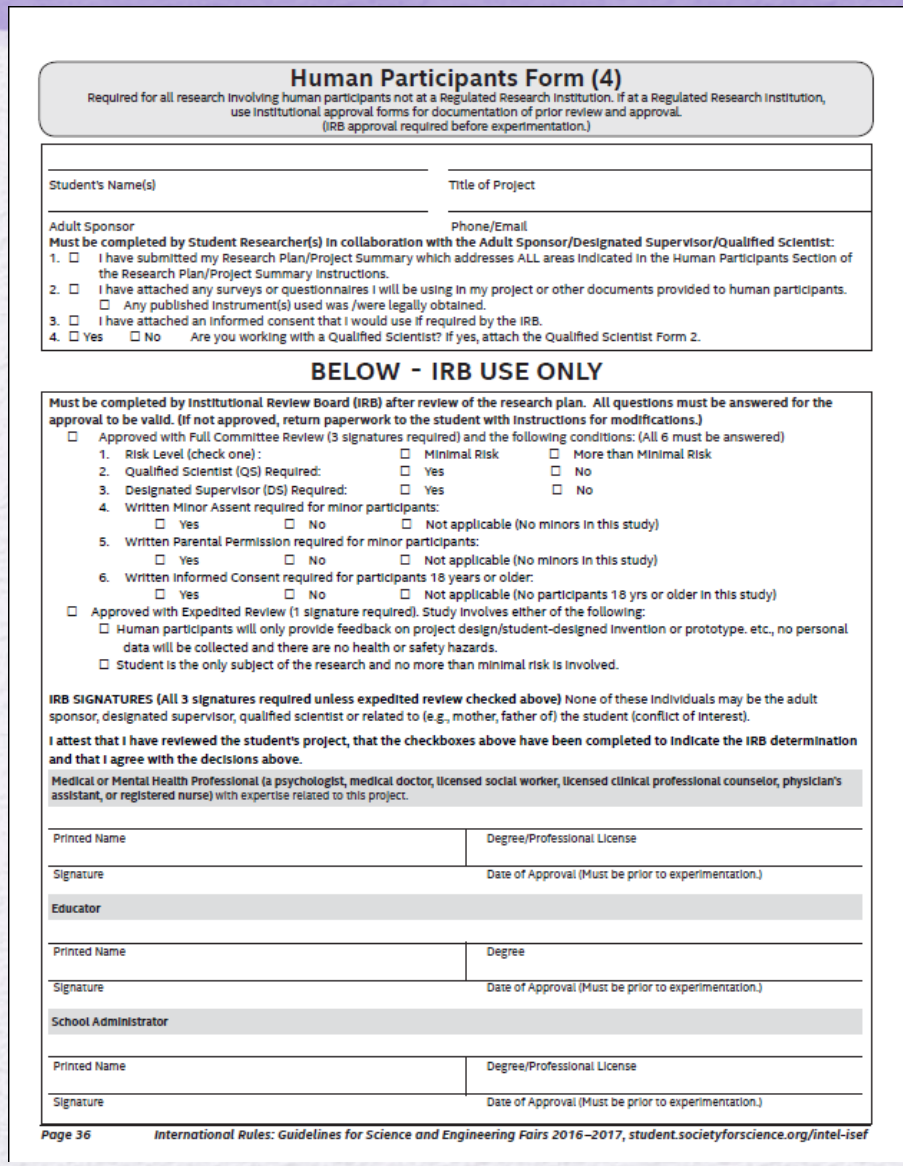
SRC/IRB Review Checklist

- Human Participants Form (4)
  - Must have IRB signatures:
    - Educator or School Administrator cannot also be the Adult Sponsor, Designated Supervisor, Qualified Scientist, or relative of the student.
    - Dates must all be prior to "actual start date" indicated on Form 1A.



Human Participants Form (4)

Required for all research involving human participants not at a Regulated Research Institution. If at a Regulated Research Institution, use institutional approval forms for documentation of prior review and approval. (IRB approval required before experimentation.)

Student's Name(s) | Title of Project

Adult Sponsor | Phone/Email

Must be completed by Student Researcher(s) in collaboration with the Adult Sponsor/Designated Supervisor/Qualified Scientist:

1. ☐ I have submitted my Research Plan/Project Summary which addresses ALL areas indicated in the Human Participants Section of the Research Plan/Project Summary Instructions.
2. ☐ I have attached any surveys or questionnaires I will be using in my project or other documents provided to human participants.
   ☐ Any published instrument(s) used was /were legally obtained.
3. ☐ I have attached an informed consent that I would use if required by the IRB.
4. ☐ Yes ☐ No Are you working with a Qualified Scientist? If yes, attach the Qualified Scientist Form 2.

BELOW - IRB USE ONLY

Must be completed by Institutional Review Board (IRB) after review of the research plan. All questions must be answered for the approval to be valid. (If not approved, return paperwork to the student with instructions for modifications.)

☐ Approved with Full Committee Review (3 signatures required) and the following conditions: (All 6 must be answered)

1. Risk Level (check one) : ☐ Minimal Risk ☐ More than Minimal Risk
2. Qualified Scientist (QS) Required: ☐ Yes ☐ No
3. Designated Supervisor (DS) Required: ☐ Yes ☐ No
4. Written Minor Assent required for minor participants: ☐ Yes ☐ No ☐ Not applicable (No minors in this study)
5. Written Parental Permission required for minor participants: ☐ Yes ☐ No ☐ Not applicable (No minors in this study)
6. Written Informed Consent required for participants 18 years or older: ☐ Yes ☐ No ☐ Not applicable (No participants 18 yrs or older in this study)

☐ Approved with Expedited Review (1 signature required). Study involves either of the following:

☐ Human participants will only provide feedback on project design/student-designed invention or prototype. etc., no personal data will be collected and there are no health or safety hazards.

☐ Student is the only subject of the research and no more than minimal risk is involved.

IRB SIGNATURES (All 3 signatures required unless expedited review checked above) None of these individuals may be the adult sponsor, designated supervisor, qualified scientist or related to (e.g., mother, father of) the student (conflict of interest).

I attest that I have reviewed the student's project, that the checkboxes above have been completed to indicate the IRB determination and that I agree with the decisions above.

Medical or Mental Health Professional (a psychologist, medical doctor, licensed social worker, licensed clinical professional counselor, physician's assistant, or registered nurse) with expertise related to this project.

Printed Name | Degree/Professional License

Signature | Date of Approval (Must be prior to experimentation.)

Educator

Printed Name | Degree

Signature | Date of Approval (Must be prior to experimentation.)

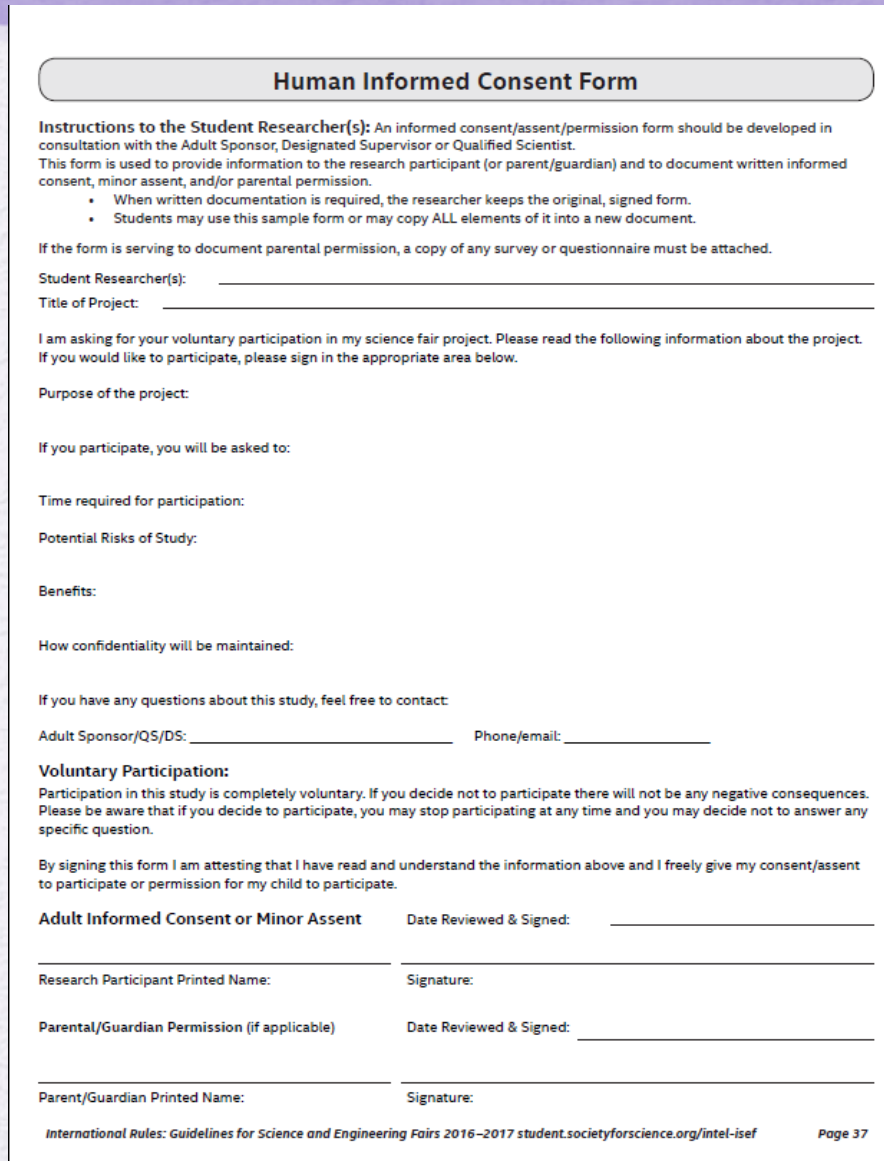
School Administrator

Printed Name | Degree/Professional License

Signature | Date of Approval (Must be prior to experimentation.)

SRC/IRB Review Checklist

- Human Informed Consent Form
  - All approval signatures must be prior to "actual start date of experiment".



Human Informed Consent Form

Instructions to the Student Researcher(s): An informed consent/assent/permission form should be developed in consultation with the Adult Sponsor, Designated Supervisor or Qualified Scientist.
This form is used to provide information to the research participant (or parent/guardian) and to document written informed consent, minor assent, and/or parental permission.

- When written documentation is required, the researcher keeps the original, signed form.
- Students may use this sample form or may copy ALL elements of it into a new document.

If the form is serving to document parental permission, a copy of any survey or questionnaire must be attached.

Student Researcher(s): _____

Title of Project: _____

I am asking for your voluntary participation in my science fair project. Please read the following information about the project. If you would like to participate, please sign in the appropriate area below.

Purpose of the project:

If you participate, you will be asked to:

Time required for participation:

Potential Risks of Study:

Benefits:

How confidentiality will be maintained:

If you have any questions about this study, feel free to contact:

Adult Sponsor/QS/DS: _____ Phone/email: _____

Voluntary Participation:
Participation in this study is completely voluntary. If you decide not to participate there will not be any negative consequences. Please be aware that if you decide to participate, you may stop participating at any time and you may decide not to answer any specific question.

By signing this form I am attesting that I have read and understand the information above and I freely give my consent/assent to participate or permission for my child to participate.

Adult Informed Consent or Minor Assent Date Reviewed & Signed: _____

_____ _____

Research Participant Printed Name: Signature:

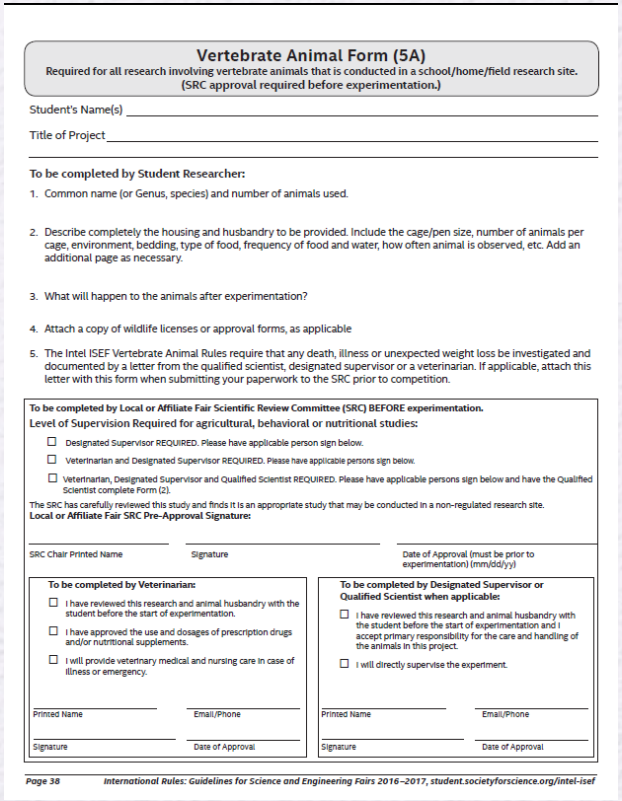
Parental/Guardian Permission (if applicable) Date Reviewed & Signed: _____

_____ _____

Parent/Guardian Printed Name: Signature:

SRC/IRB Review Checklist

If vertebrate animal study is done at school, home or field site, use form 5A and SRC/IRB pre-approval is required.



Vertebrate Animal Form (5A)

Required for all research involving vertebrate animals that is conducted in a school/home/field research site. (SRC approval required before experimentation.)

Student's Name(s) _____

Title of Project _____

To be completed by Student Researcher:

1. Common name (or Genus, species) and number of animals used.
2. Describe completely the housing and husbandry to be provided. Include the cage/pen size, number of animals per cage, environment, bedding, type of food, frequency of food and water, how often animal is observed, etc. Add an additional page as necessary.
3. What will happen to the animals after experimentation?
4. Attach a copy of wildlife licenses or approval forms, as applicable
5. The Intel ISEF Vertebrate Animal Rules require that any death, illness or unexpected weight loss be investigated and documented by a letter from the qualified scientist, designated supervisor or a veterinarian. If applicable, attach this letter with this form when submitting your paperwork to the SRC prior to competition.

To be completed by Local or Affiliate Fair Scientific Review Committee (SRC) BEFORE experimentation.

Level of Supervision Required for agricultural, behavioral or nutritional studies:

- ☐ Designated Supervisor REQUIRED. Please have applicable person sign below.
- ☐ Veterinarian and Designated Supervisor REQUIRED. Please have applicable persons sign below.
- ☐ Veterinarian, Designated Supervisor and Qualified Scientist REQUIRED. Please have applicable persons sign below and have the Qualified Scientist complete Form (2).

The SRC has carefully reviewed this study and finds it is an appropriate study that may be conducted in a non-regulated research site.

Local or Affiliate Fair SRC Pre-Approval Signature:

SRC Chair Printed Name | Signature | Date of Approval (must be prior to experimentation) (mm/dd/yy)

To be completed by Veterinarian:

- ☐ I have reviewed this research and animal husbandry with the student before the start of experimentation.
- ☐ I have approved the use and dosages of prescription drugs and/or nutritional supplements.
- ☐ I will provide veterinary medical and nursing care in case of illness or emergency.

Printed Name | Email/Phone

Signature | Date of Approval

To be completed by Designated Supervisor or Qualified Scientist when applicable:

- ☐ I have reviewed this research and animal husbandry with the student before the start of experimentation and I accept primary responsibility for the care and handling of the animals in this project.
- ☐ I will directly supervise the experiment.

Printed Name | Email/Phone

Signature | Date of Approval

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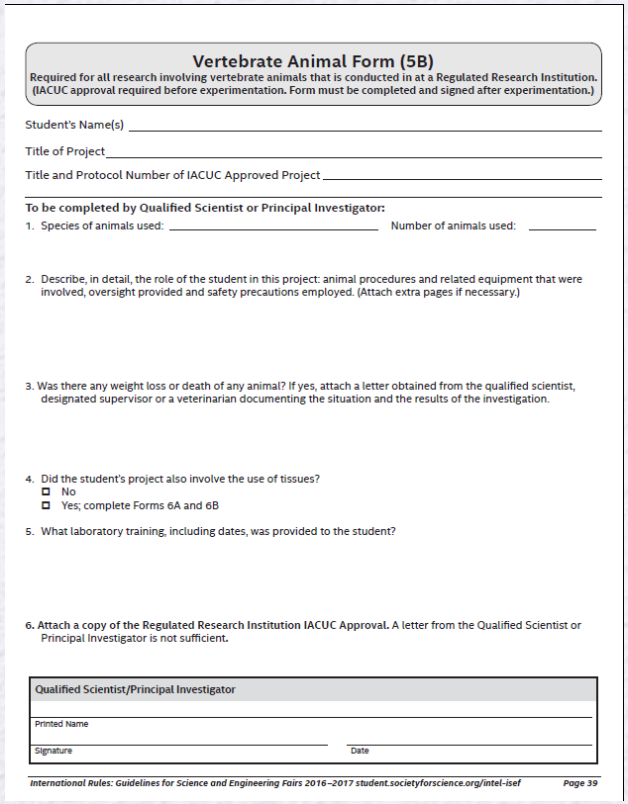
If vertebrate animal study is done at a Regulated Research Institution, use Form 5B.



Vertebrate Animal Form (5B)

Required for all research involving vertebrate animals that is conducted in at a Regulated Research Institution. (IACUC approval required before experimentation. Form must be completed and signed after experimentation.)

Student's Name(s) _____

Title of Project _____

Title and Protocol Number of IACUC Approved Project _____

To be completed by Qualified Scientist or Principal Investigator:

1. Species of animals used: _____ Number of animals used: _____
2. Describe, in detail, the role of the student in this project: animal procedures and related equipment that were involved, oversight provided and safety precautions employed. (Attach extra pages if necessary.)
3. Was there any weight loss or death of any animal? If yes, attach a letter obtained from the qualified scientist, designated supervisor or a veterinarian documenting the situation and the results of the investigation.
4. Did the student's project also involve the use of tissues?
   - ☐ No
   - ☐ Yes; complete Forms 6A and 6B
5. What laboratory training, including dates, was provided to the student?
6. **Attach a copy of the Regulated Research Institution IACUC Approval.** A letter from the Qualified Scientist or Principal Investigator is not sufficient.

Qualified Scientist/Principal Investigator

Printed Name

Signature | Date

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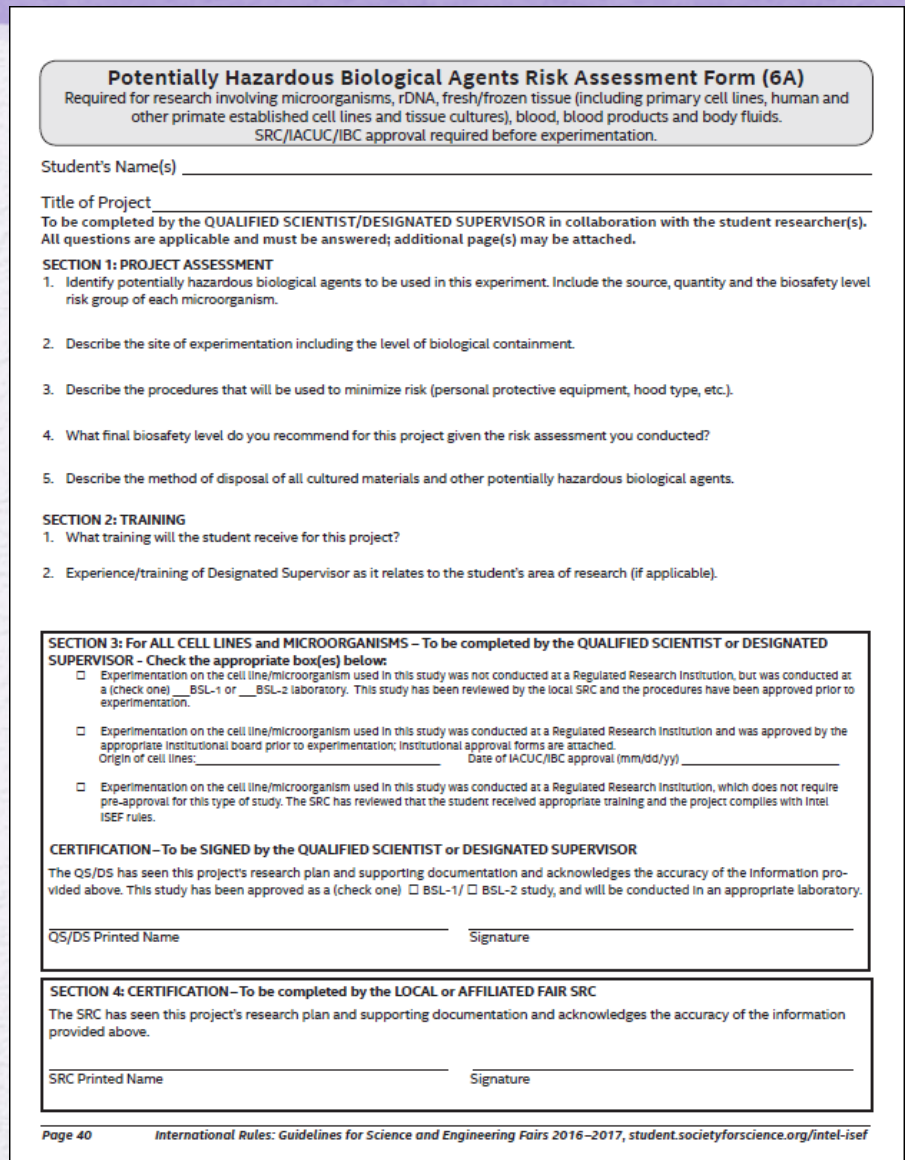
SRC/IRB Review Checklist

- Potentially Hazardous Biological Agents Risk Assessment Form (6A):
  - Source, quantity and BSL (biological safety level) must be identified.
  - BSL-3 and BSL-4 studies are NOT ALLOWED.
  - Microorganisms MAY NOT be cultured at home.
  - Must have signatures of Designated Supervisor or Qualified Scientist and the Regional Fair SRC/IRB.



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 the QUALIFIED SCIENTIST/DESIGNATED SUPERVISOR in collaboration with the student researcher(s). All questions are applicable and must be answered; additional page(s) may be attached.

SECTION 1: PROJECT ASSESSMENT

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 equipment, 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.

SECTION 2: TRAINING

1. What training will the student receive for this project?
2. Experience/training of Designated Supervisor as it relates to the student's area of research (if applicable).

SECTION 3: For ALL CELL LINES and MICROORGANISMS – To be completed by the QUALIFIED SCIENTIST or DESIGNATED SUPERVISOR – Check the appropriate box(es) below:

☐ Experimentation on the cell line/microorganism used in this study was not conducted at a Regulated Research Institution, but was conducted at a (check one) ___BSL-1 or ___BSL-2 laboratory. This study has been reviewed by the local SRC and the procedures have been approved prior to experimentation.

☐ Experimentation on the cell line/microorganism used in this study was conducted at a Regulated Research Institution and was approved by the appropriate Institutional board prior to experimentation; Institutional approval forms are attached.
Origin of cell lines:_____ Date of IACUC/IBC approval (mm/dd/yy) _____

☐ Experimentation on the cell line/microorganism used in this study was conducted at a Regulated Research Institution, which does not require pre-approval for this type of study. The SRC has reviewed that the student received appropriate training and the project complies with Intel ISEF rules.

CERTIFICATION – To be SIGNED by the QUALIFIED SCIENTIST or DESIGNATED SUPERVISOR

The QS/DS has seen this project's research plan and supporting documentation and acknowledges the accuracy of the information provided above. This study has been approved as a (check one) ☐ BSL-1/ ☐ BSL-2 study, and will be conducted in an appropriate laboratory.

QS/DS Printed Name _____ Signature _____

SECTION 4: CERTIFICATION – To be completed by the LOCAL or AFFILIATED FAIR SRC

The SRC has seen this project's research plan and supporting documentation and acknowledges the accuracy of the information provided above.

SRC Printed Name _____ Signature _____

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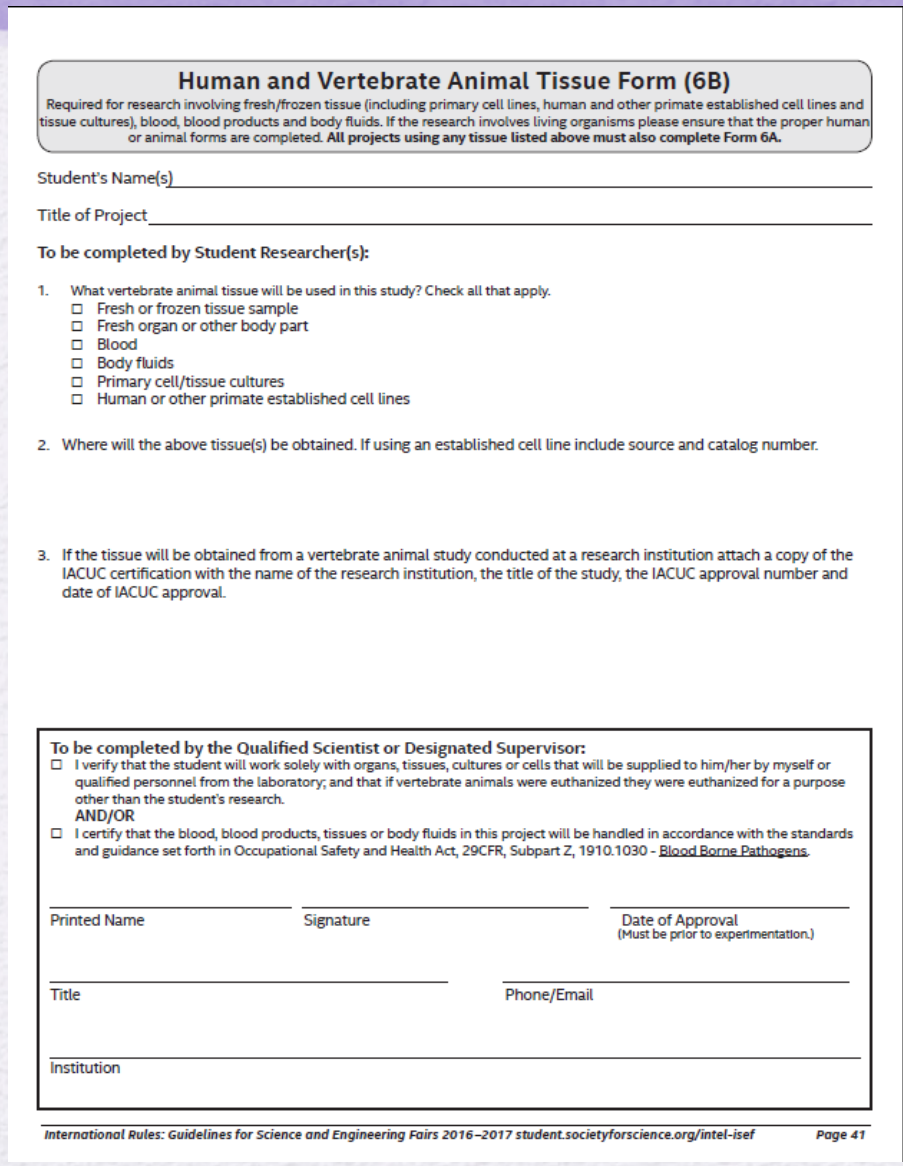
SRC/IRB Review Checklist

- Human and Vertebrate Animal Tissue Form (6B):
  - Animals may not be euthanized solely for the purpose of the student research.
  - Substances must be handled in accordance with standards for Blood Borne Pathogens.
  - Signature of Designated Supervisor or Qualified Scientist is required.



Human and Vertebrate Animal Tissue Form (6B)

Required for research involving fresh/frozen tissue (including primary cell lines, human and other primate established cell lines and tissue cultures), blood, blood products and body fluids. If the research involves living organisms please ensure that the proper human or animal forms are completed. **All projects using any tissue listed above must also complete Form 6A.**

Student's Name(s)_____

Title of Project_____

To be completed by Student Researcher(s):

1. What vertebrate animal tissue will be used in this study? Check all that apply.
   - ☐ Fresh or frozen tissue sample
   - ☐ Fresh organ or other body part
   - ☐ Blood
   - ☐ Body fluids
   - ☐ Primary cell/tissue cultures
   - ☐ Human or other primate established cell lines
2. Where will the above tissue(s) be obtained. If using an established cell line include source and catalog number.
3. If the tissue will be obtained from a vertebrate animal study conducted at a research institution attach a copy of the IACUC certification with the name of the research institution, the title of the study, the IACUC approval number and date of IACUC approval.

To be completed by the Qualified Scientist or Designated Supervisor:

☐ I verify that the student will work solely with organs, tissues, cultures or cells that will be supplied to him/her by myself or qualified personnel from the laboratory; and that if vertebrate animals were euthanized they were euthanized for a purpose other than the student's research.

AND/OR

☐ I certify that the blood, blood products, tissues or body fluids in this project will be handled in accordance with the standards and guidance set forth in Occupational Safety and Health Act, 29CFR, Subpart Z, 1910.1030 - Blood Borne Pathogens.

Printed Name _____ Signature _____ Date of Approval (Must be prior to experimentation.) _____

Title _____ Phone/Email _____

Institution _____

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SRC/IRB Review Checklist

- Continuation/Research Progression Projects Form (7):
  - All information should be visible on the form (i.e., NO "see attached" comments in the boxes).
  - Research Plans & Abstracts from previous years must be attached.
  - A study is a continuation if …
    - the study is in the same field
    - information from a previous year helped with the current study
    - the current study refers to earlier research done by the same student.
    - longitudinal studies are OK, but original data from a previous year cannot be presented (only a comparison between years can be presented).

Studies that are repetitions of a previous study with no changes except an increase in sample size or retests are NOT PERMITTED.

Continuation/Research Progression Projects Form (7)
Required for projects that are a continuation/progression in the same field of study as a previous project.
This form must be accompanied by the previous year's abstract and Research Plan/Project Summary.

Student's Name(s)_____

To be completed by Student Researcher:

List all components of the current project that make it new and different from previous research. The information must be on the form; use an additional form for 2013–2014 and earlier projects.

Components	Current Research Project	Previous Research Project
1. Title		2015–2016 2014–2015
2. Change in goal/purpose/ objective		2015–2016 2014–2015
3. Changes in methodology		2015–2016 2014–2015
4. Variables studied		2015–2016 2014–2015
5. Additional changes		2015–2016 2014–2015

Attached are:
☐ 2015–2016 Abstract and Research Plan/Project Summary ☐ 2014–2015 Abstract

I hereby certify that the above information is correct and that the current year Abstract & Certification and project display board properly reflect work done only in the current year.

Student's Printed Name(s) Signature Date of Signature

Questions?

- If you are in doubt about the paperwork or ISEF Rules & Guidelines please seek out clarification:
  - For an overview of forms and dates: https://student.societyforscience.org/overview-forms-and-dates
  - Consult an electronic rules wizard (not foolproof, however): https://apps2.societyforscience.org/wizard/index.asp
  - Call the Wyoming State Science Fair office (If we don't immediately know the answer, we'll find out and get back to you.): 307-766-9863 or write to wyostatefair@gmail.com .