APPLICATION TO THE HCCC SCIENCE FAIR

YOU MUST PROVIDE ALL INFORMATION REQUESTED ON THIS APPLICATION AND ON ANY OF THE FORMS REQUIRED FOR YOUR PROJECT TYPE. READ THE ISEF RULEBOOK CAREFULLY!

www.societyforscience.org/isef/document/

APPLICATIONS POSTMARKED AFTER January 15th CANNOT BE ACCEPTED.

_____

NAME: LAST FIRST HOME TELEPHONE **GRADE**

_____

ADDRESS: STREET CITY ZIP

_____

SCHOOL: NAME SCHOOL TELEPHONE

_____

SCHOOL ADDRESS: STREET CITY ZIP

PLEASE fill in the following information completely:

_____

Teacher Sponsor's NAME: LAST FIRST TELEPHONE (Home or School)

_____

(HOME OR SCHOOL) ADDRESS CITY ZIP

TITLE OF PROJECT:_____

PROJECT CATEGORIES (**CIRCLE YOUR PROJECT CATEGORY**)

NATURAL SCIENCE DIVISION:
Behavioral and Social Science
Botany
Environmental Science
Gerontology
Medicine and Health
Microbiology
Zoology
PHYSICAL SCIENCE DIVISION:
Biochemistry
Chemistry
Earth and Space Sciences
Physics
APPLIED SCIENCE DIVISION:
Computer Science
Engineering
Mathematics

(YOU MUST SUPPLY ALL ITEMS NEEDED FOR YOUR PROJECT)

PROJECT CANNOT BE ACCEPTED UNLESS THIS SECTION IS PROPERLY COMPLETED

I have read the ISEF Rules book carefully and completely and certify that this project meets all rules and, _____ does NOT involve Human subjects OR _____DOES involve Human subjects, has been reviewed by an IRB, and all required forms are attached.

_____ _____

PARTICIPANT'S SIGNATURE **TEACHER SPONSOR'S SIGNATURE**

OFFICIAL USE ONLY (DO NOT FILL IN)

DATE RECEIVED _____ NUMBER _____

SIGNATURES REQUIRED ON REVERSE SIDE (Next page)

Summary of Display & Safety Regulations (for specifics go to www.societyforscience.org/isef/document/)

Not Allowed at Project or in Booth

1) Living organisms, including plants.
2) Taxidermy specimens or parts.
3) Preserved vertebrate or invertebrate animals.
4) Human or animal food.
5) Human/animal parts or body fluids (for example, blood, urine) (Exceptions: teeth, hair, nails, dried animal bones, histological dry mount sections, and completely sealed wet mount tissue slides).
6) Plant materials (living, dead, or preserved) which are in their raw, unprocessed, or non-manufactured state (Exception: manufactured construction materials used in building the project or display).
7) Laboratory/household chemicals including water (Exceptions: water integral to an enclosed apparatus or water supplied by the Display and Safety Committee).
8) Poisons, drugs, controlled substances, hazardous substances or devices (for example, firearms, weapons, ammunition, reloading devices).
9) Dry ice or other sublimating solids.
10) Sharp items (for example, syringes, needles, pipettes, knives).
11) Flames of highly flammable materials.
12) Batteries with open-top cells.
13) Awards, medals, business cards, flags, etc. (Exception: The current year Intel ISEF medal may be worn at all times).
14) Photographs or other visual presentations depicting vertebrate animals in surgical techniques, dissections, necropsies, other lab procedures.
15) Active Internet or e-mail connections as part of displaying or operating the project at the Intel ISEF.
16) Glass or glass objects unless deemed by the Display and Safety Committee to be an integral and necessary part of the project (Exception: glass that is an integral part of a commercial product such as a computer screen).
17) Any apparatus deemed unsafe by the Scientific Review Committee, the Display and Safety Committee, or Science Service (for example, large vacuum tubes or dangerous ray-generating devices, empty tanks that previously contained combustible liquids or gages, pressurized tanks, etc).

Allowed at Project or in Booth BUT with the Restrictions indicated

1) Soil or waste samples **if permanently encased in a slab of acrylic.**
2) Postal addresses, World Wide Web and e-mail addresses, telephone numbers, and fax numbers **of Finalist only.**
3) Only photographs (that is, visual depictions) of the Finalist, the Finalist's family, photographs taken by the Finalist, and/or photographs for which credit is displayed (such as from magazines, newspapers, journals, etc.) **if not deemed offensive** by the Scientific Review Committee, the Display and Safety Committee or Science Service.
4) Any apparatus with unshielded belts, pulleys, chains, or moving parts with tension or pinch points **if for display only and not operated**.
5) Class II lasers **if**:
a) Operated only by the Finalist
b) Operated only during Display and Safety inspection and during judging.
c) Labeled with a sign reading "Laser Radiation: Do Not Stare Into Beam."
d) Enclosed in protective housing that prevents physical and visual access to beam.
e) Disconnected when not operating.
6) Class III and IV lasers **if for display only and not operated**.
7) Any apparatus producing temperatures that will cause physical burns **if adequately insulated**.

Electrical Regulations at the Intel ISEF

1) Finalists requiring 120 or 220 Volt AC electrical circuits must provide a UL-listed 3-wire extension cord which is appropriate for the load and equipment.
2) Electrical power supplied to projects and, therefore, the maximums allowed for projects is 120 or 220 Volt, AC, single phase,60 cycle. Maximum circuit amperage/wattage available is determined by the electrical circuit capacities of the exhibit hall and may be adjusted onsite by the Display and Safety Committee. For all electrical regulations, "120 Volt A.C." or "220 Volt A.C." is intended to encompass the corresponding range or voltage as supplied by the facility in which the Intel ISEF is being held.
3) See "Additional Electrical Regulations at the Intel ISEF" for other electrical rules.

Maximum Size of Project at the Intel ISEF

30 inches (76 centimeters) deep
48 inches (122 centimeters) wide
108 inches (274 centimeters) high including table

My project will follow the Intel ISEF Display and Safety Regulations found at www.societyforscience/ISEF/document/

_____ _____ _____

Participant's Signature Sponsor's Signature Parent Guardian Signature

Complete both pages and mail to:

HCCC Science Fair, 100 Reservoir Rd, Herkimer, NY 13350

NOTE: YOU MUST SUBMIT "Checklist for Adult Sponsor (1)" and "Student Checklist (1A)"

with this application or it will not be valid. ***(See the next pages)***

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 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 and for projects using manure for composting, fuel production or other non-culturing experiments (6A, 6B and 2 are not required)
   [ ] 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 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 Form (7)

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

Start Date: _____ End Date: _____

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

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
- Data Analysis: Describe the procedures you will use to analyze the data that answer research question or hypothesis

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, birthdates, 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