Designing an Intel ISEF *Affiliated Science Fair* Project Display Board

What a Well-Designed Project Board Should Accomplish

- Provides judges and the public with an overview of your project when you are not there to explain
- Emphasizes succinctly the scope of the project, the nature of the research, and the results
- Demonstrates your authority as a researcher by the neatness and correctness of the information presented

Considerations before You Begin

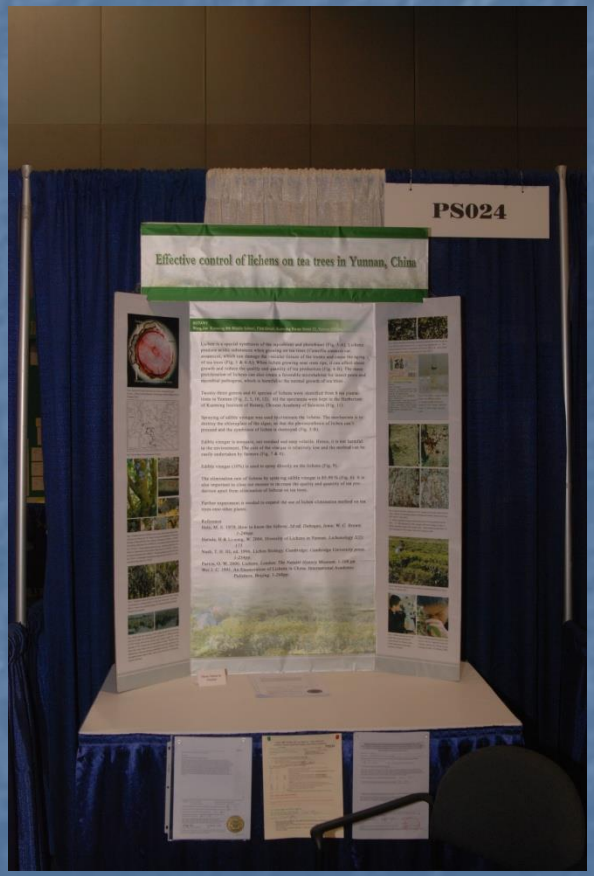
- Type of Display:
  - Tabletop (*Note: If a table is used, the height, width, and depth of the table must be considered part of the project and figured in with the total dimensions of the project.*
  - Freestanding

- Origin of Board:
  - Commercial
  - Self-made

- As you may have to travel by air to the Intel ISEF, consider developing a display that is light in weight and portable in size that can be carried easily on the plane or shipped quickly and inexpensively.

Examples of Freestanding Displays

Tabletop Displays



In the examples just shown, you will note that each is a project that can be easily assembled at the Intel ISEF and would not exceed 70 lbs. in weight.

They are also examples of boards that can be reused, or at least the frameworks can be reused, should you intend on competing additional years.

Dimensions of Project Display

- Tables supplied to Finalists at Intel ISEF are the permitted width (side to side: 48”/76 cm) and depth (front to back: 30”/122 cm).
- The permitted height (floor to top) from the floor to the top of the project is 108”/274 cm.

A Few Rules to Follow

- Keep the display simple. Avoid clutter. Judges and the public viewing the board must be able to comprehend quickly what your research involved.
- Use no more than two or three colors, and choose colors appropriate to your subject.
- Arrange the information logically.
- Label all data tables, charts, graphs, or photographs you use.

PowerPoints & Videos

PowerPoints and videos can be excellent complements to the text and graphics on a project board. However, they should not be the sole presentation of the project for the following reasons:

- *PowerPoint and Video presentations must be reviewed for content. If there are any major violations in the content, it may be too difficult to make changes in time for judging*
- *Judges or the public seldom take the time to view the whole presentation*

Project Booth Configuration at Intel ISEF

- Your project must be positioned at the rear of the booth parallel to the back curtain. This includes a table if used, with the chair or chairs on the side in front of the project as illustrated in the example.

What the Board Should Display

Purpose	Title	Results
	(Keep it simple)	Conclusion
Hypothesis	Graphs	Abstract
Materials	Pictures	Other Required Paperwork
Procedure	Data	

The Project Title

- Again, keep it simple and short. It should be readable from a minimum of six feet.

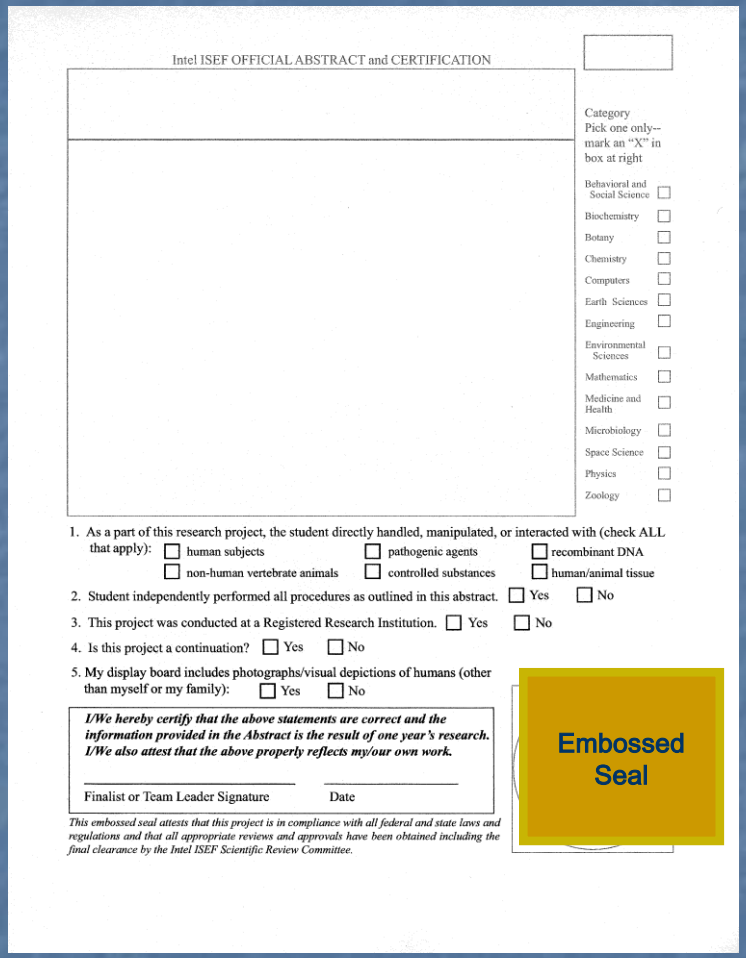
- Try to develop a phrasing that captures attention but succinctly represents your research.

Required Paperwork for Intel ISEF

- Every Finalist must display vertically
  - *an Original Abstract*
  - *an SRC/DS2 Approval*.
- In addition, if the Finalist is continuing research from a previous year and/or has used a research institution, the following documents must be displayed:
  - *Continuation Research Form 7*
  - *Research Institution Form 1C*
- If a Finalist uses Human Subjects and/or displays pictures of individuals other than family members, signed consent forms must be kept in a folder at the display.

Original Abstract

- Every Finalist must display vertically an Original Abstract. The abstract must be the one the Finalist submits when registering for Intel ISEF. A Finalist will receive an embossed copy of the abstract once the project has been cleared for set-up.



Intel ISEF OFFICIAL ABSTRACT and CERTIFICATION

Category
Pick one only--mark an "X" in box at right

- Behavioral and Social Science ☐
- Biochemistry ☐
- Botany ☐
- Chemistry ☐
- Computers ☐
- Earth Sciences ☐
- Engineering ☐
- Environmental Sciences ☐
- Mathematics ☐
- Medicine and Health ☐
- Microbiology ☐
- Space Science ☐
- Physics ☐
- Zoology ☐

1. As a part of this research project, the student directly handled, manipulated, or interacted with (check ALL that apply): ☐ human subjects ☐ pathogenic agents ☐ recombinant DNA ☐ non-human vertebrate animals ☐ controlled substances ☐ human/animal tissue
2. Student independently performed all procedures as outlined in this abstract. ☐ Yes ☐ No
3. This project was conducted at a Registered Research Institution. ☐ Yes ☐ No
4. Is this project a continuation? ☐ Yes ☐ No
5. My display board includes photographs/visual depictions of humans (other than myself or my family): ☐ Yes ☐ No

I/We hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I/We also attest that the above properly reflects my/our own work.

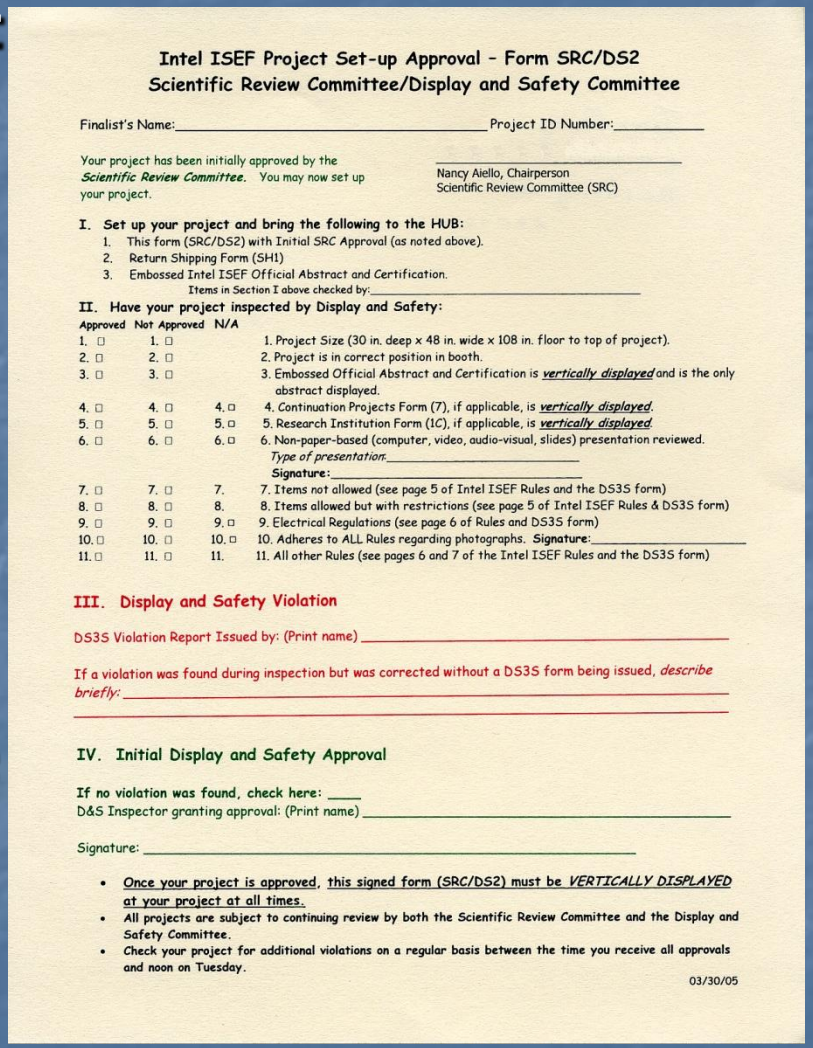
Finalist or Team Leader Signature _____ Date _____

This embossed seal attests that this project is in compliance with all federal and state laws and regulations and that all appropriate reviews and approvals have been obtained including the final clearance by the Intel ISEF Scientific Review Committee.

Embossed Seal

Completed Intel ISEF Project Set-up Approval Form SRC/DS2

- Every Finalist must display vertically the signed SRC/DS2 Approval Form once the project has been approved by a Display and Safety inspector.



Intel ISEF Project Set-up Approval – Form SRC/DS2
Scientific Review Committee/Display and Safety Committee

Finalist's Name:_____ Project ID Number:_____

Your project has been initially approved by the *Scientific Review Committee*. You may now set up your project.

_____
Nancy Aiello, Chairperson
Scientific Review Committee (SRC)

I. Set up your project and bring the following to the HUB:

1. This form (SRC/DS2) with Initial SRC Approval (as noted above).
2. Return Shipping Form (SH1)
3. Embossed Intel ISEF Official Abstract and Certification.

Items in Section I above checked by:_____

II. Have your project inspected by Display and Safety:

Approved	Not Approved	N/A	
1. ☐	1. ☐		1. Project Size (30 in. deep x 48 in. wide x 108 in. floor to top of project).
2. ☐	2. ☐		2. Project is in correct position in booth.
3. ☐	3. ☐		3. Embossed Official Abstract and Certification is ***vertically displayed*** and is the only abstract displayed.
4. ☐	4. ☐	4. ☐	4. Continuation Projects Form (7), if applicable, is ***vertically displayed***.
5. ☐	5. ☐	5. ☐	5. Research Institution Form (1C), if applicable, is ***vertically displayed***.
6. ☐	6. ☐	6. ☐	6. Non-paper-based (computer, video, audio-visual, slides) presentation reviewed. *Type of presentation*:_____ **Signature:**_____
7. ☐	7. ☐	7.	7. Items not allowed (see page 5 of Intel ISEF Rules and the DS3S form)
8. ☐	8. ☐	8.	8. Items allowed but with restrictions (see page 5 of Intel ISEF Rules & DS3S form)
9. ☐	9. ☐	9. ☐	9. Electrical Regulations (see page 6 of Rules and DS3S form)
10. ☐	10. ☐	10. ☐	10. Adheres to ALL Rules regarding photographs. **Signature:**_____
11. ☐	11. ☐	11.	11. All other Rules (see pages 6 and 7 of the Intel ISEF Rules and the DS3S form)

III. Display and Safety Violation

DS3S Violation Report Issued by: (Print name) _____

If a violation was found during inspection but was corrected without a DS3S form being issued, *describe briefly*: _____

_____

IV. Initial Display and Safety Approval

If no violation was found, check here: ____
D&S Inspector granting approval: (Print name) _____

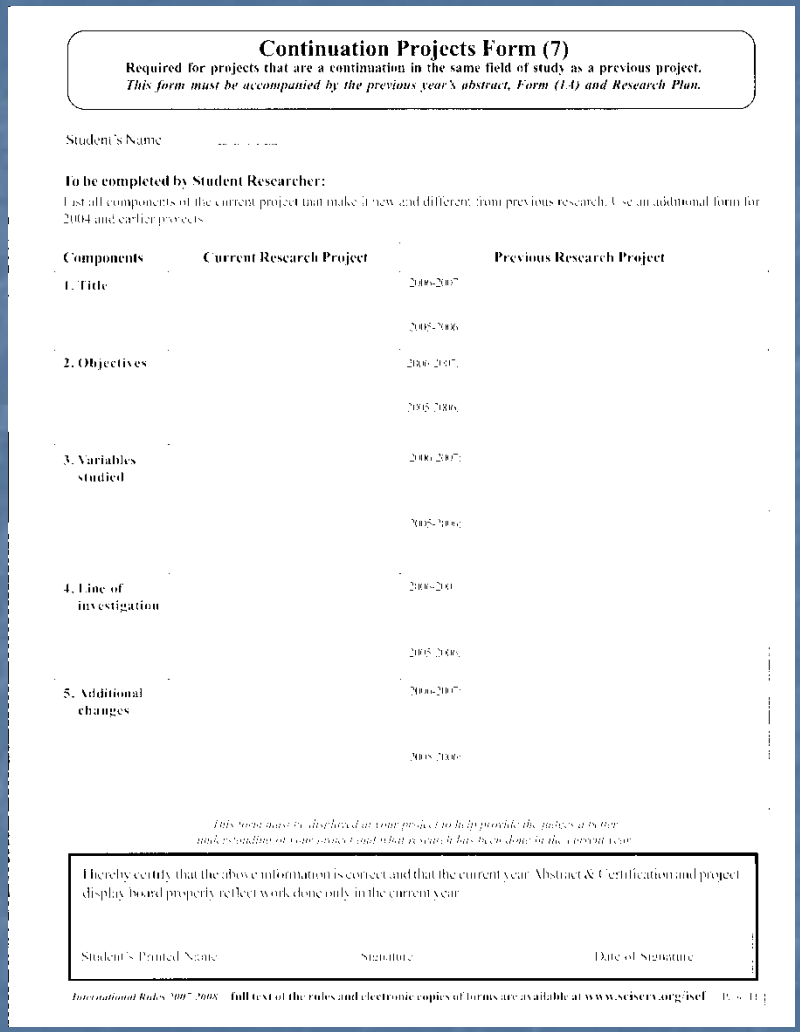
Signature: _____

- **Once your project is approved, this signed form (SRC/DS2) must be *VERTICALLY DISPLAYED* at your project at all times.**
- **All projects are subject to continuing review by both the Scientific Review Committee and the Display and Safety Committee.**
- **Check your project for additional violations on a regular basis between the time you receive all approvals and noon on Tuesday.**

03/30/05

Continuation Project Form 7

- If the project is a continuation of the previous year's research, a copy of Form 7 must be vertically displayed.



Continuation Projects Form (7)

Required for projects that are a continuation in the same field of study as a previous project.
This form must be accompanied by the previous year's abstract, Form (1A) and Research Plan.

Student's Name

To be completed by Student Researcher:

List all components of the current project that make it new and different from previous research. Use an additional form for 2004 and earlier projects.

Components	Current Research Project	Previous Research Project
1. Title		2006-2007
		2005-2006
2. Objectives		2006-2007
		2005-2006
3. Variables studied		2006-2007
		2005-2006
4. Line of investigation		2006-2007
		2005-2006
5. Additional changes		2006-2007
		2005-2006

This form must be displayed at your project to help provide the judges with the understanding of how your project and what research has been done in the current year.

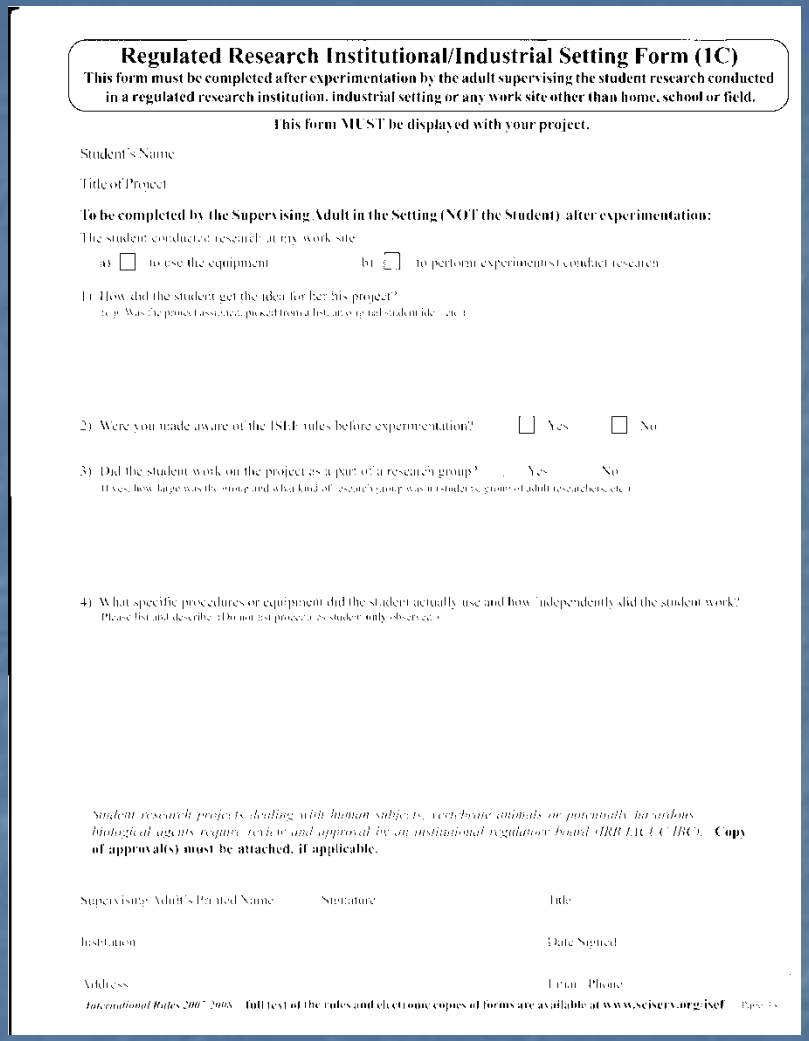
I hereby certify that the above information is correct and that the current year Abstract & Certification and project display board properly reflect work done only in the current year.

Student's Printed Name | Signature | Date of Signature

International Rules 2007-2008 **full text of the rules and electronic copies of forms are available at www.sciserv.org/isef**

Regulated Research Institution Form 1C

- If a research institution is used, a copy of Form 1C must be vertically displayed.



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.

Student's Name

Title of Project

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

The student conducted research at my work site

a) ☐ to use the equipment b) ☐ to perform experiments/conduct research

1) How did the student get the idea for her/his project?
(e.g. Was the project based on a previous project from a list, an area of personal interest, etc.)

2) Were you made aware of the ISEF rules before experimentation? ☐ Yes ☐ No

3) Did the student 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.)

4) What specific procedures or equipment did the student actually use and how "independently did the student work?"
Please list and describe. (Do not just provide as student only observed.)

Student research projects dealing with human subjects, 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

Address Email Phone

International Rules 2007-2008 - **full text of the rules and electronic copies of forms are available at www.sciserv.org/isef**

Photo Release/Consent Form

- Display of photographs other than the finalist must have a photo release signed by the subject, and if under 18 years of age, also by the guardian of the subject. These forms should not be displayed in order to protect the anonymity of human subjects but must be available for the inspector to check.

Sample Text for a Release/Consent Form

I consent to the use of visual images (photos, videos, etc.) involving my participation/my child's participation in this research.

_____

Signed

Other Display Considerations

- In addition to displaying required paperwork and a summary explanation of the research project procedure and conclusions, the Finalist may want to include the following:
  - Graphs of data that represents depth of research or conclusions
  - Pictures or illustrations of procedures
  - Data books
  - Mock-ups of specific designs, or laptop illustrations of procedures, etc.

The aforementioned are permitted in a display as long as they do not include items *Not Allowed for Display*, such as the following:

- living organisms (including plants)
- taxidermy specimens
- preserved vertebrate or invertebrate animals
- human/animal food
- human/animal parts or body fluids
- chemicals
- drugs
- and other items listed in the Rules.

Complete list of rules available at this site:
http://societyforscience.org/isef/document/

Other Points to Consider

- Credit all images/photos and provide photo consent/release forms
- Make certain acknowledgments have been eliminated as they are permitted only in the research paper
- Make backup copies of all paperwork in case any is lost or misplaced
- Develop a way to secure a laptop or any permitted piece of equipment to prevent theft
- Make certain any lights or electrical equipment is UL-approved
- Provide your own UL power strip if you need more than one outlet

Examples of Items Not Allowed

The example on right illustrates soil or waste materials not properly sealed in acrylic.

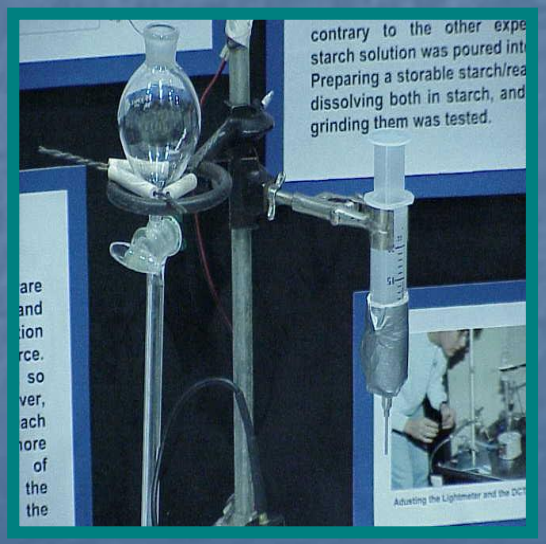
The example at left illustrates plant and soil materials properly encased in acrylic.

Photographs of vertebrate animals in lab procedures, unnatural environments, or stress situations not allowed.

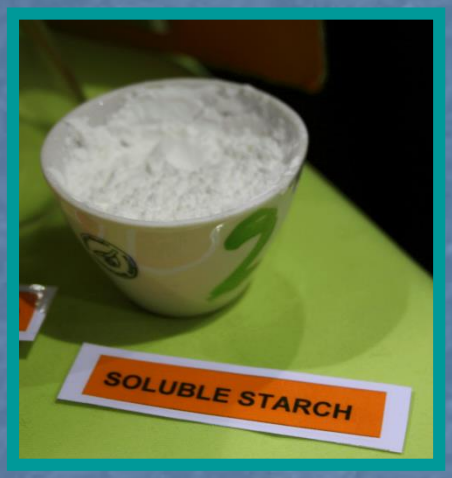
Containers of plants and dirt not allowed.

Glass items not allowed.

Plant and other dried materials scattered for decoration are not allowed.



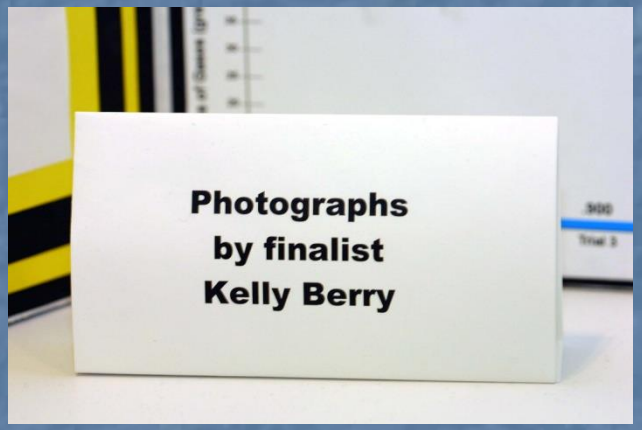
Chemical or chemical compounds not allowed.

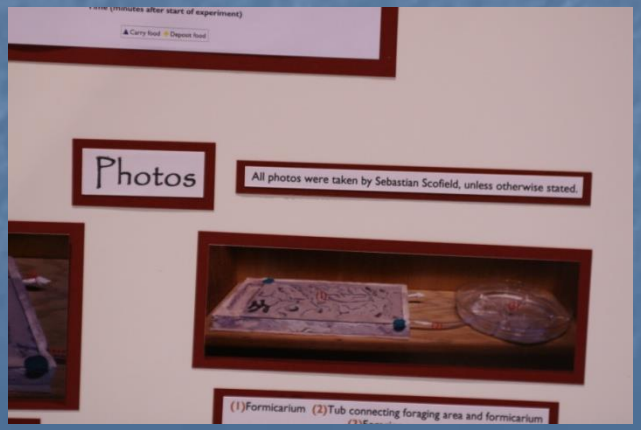


Sharp objects, such as this needle, are not allowed.

How to Credit Photos/Images

- Any photos, images, and graphs used in the display must be credited. If the finalist created all photos/images, a single credit is sufficient.
- Photos of human subjects must have consent/release forms.



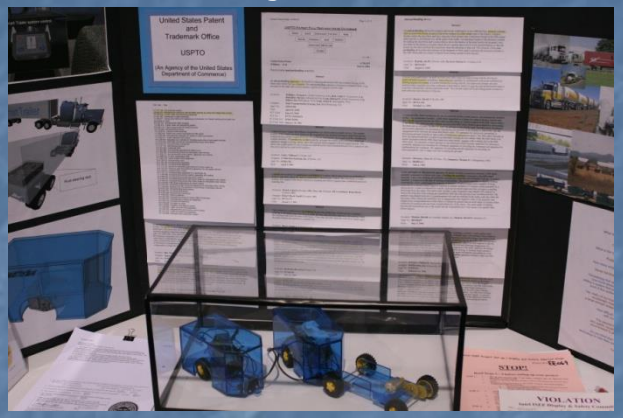


- If your display includes an electrical or engineering design , make certain that there is no exposed wiring and connections without non-conducting shielding or a grounded metal box or cage.

- The project to the right illustrates a display that would not be approved.

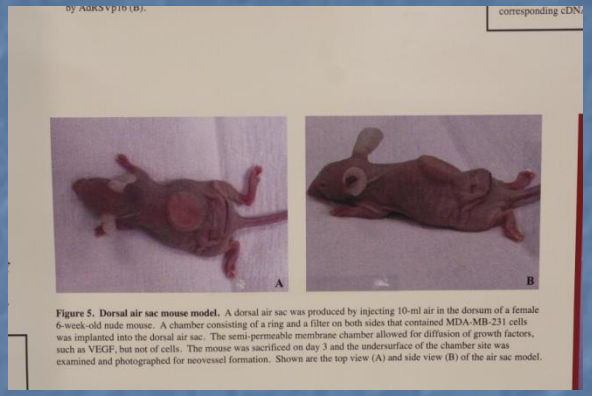
Examples of Typical Violations

Project 1



Unofficial abstracts displayed

Project 2



Inappropriate animal pictures

Project 3

No Photo Credits

Project 4

Chemicals not allowed

Correct Freestanding Display

- All equipment displayed here meets safety regulations.
- Paperwork hanging at top of display permitted.
- No awards, acknowl-edgments, handouts, etc., or addresses other than Finalist's are visible.

Correct Display Using Table Provided By Intel ISEF

- Tri-fold board does not extend over edges of the provided table, which is 30” by 48”.
- Required paperwork is properly displayed on front of table.
- All images properly credited

Other Resources

- ISEF Rules Wizard
  http://www.societyforscience.org/isef/students/wizard/index.asp

  The Rules Wizard has been designed as a first step to help you determine what forms and approvals are necessary before beginning a science fair project intended for competition at an ISEF-affiliated fair or the Intel International Science and Engineering Fair.

- D & S Inspectors Manual:
  http://www.societyforscience.org/isef/document/hubman.asp

  This site contains a training PPt. for Host Committee D & S Inspectors that provides additional information on appropriate displays.

- SRC PowerPoint: http://www.societyforscience.org/isef/

  The Scientific Review PowerPoint reviews regulations for projects. Reviews role of supervisors, etc., and all required paperwork.

Board Websites

- http://www.officedepot.com/
- http://www.staples.com/

Office Depot and Staples are national suppliers of office materials used in developing project boards.

- http://www.showboard.com/

Show Board is a national supplier of boards frequently used in science fair projects.

- http://www.sciencebuddies.org/mentoring/project_display_board_advanced_design.shtml

Science Buddies is an excellent site for free science fair project ideas, answers, and tools.

Intel ISEF Contacts for Additional Information

- John Cole, Chair of ISEF Display & Safety Committee, dejavu60@msn.com
- Nancy Aiello, Chair of the ISEF Scientific Review Committee, SRC@societyforscience.org