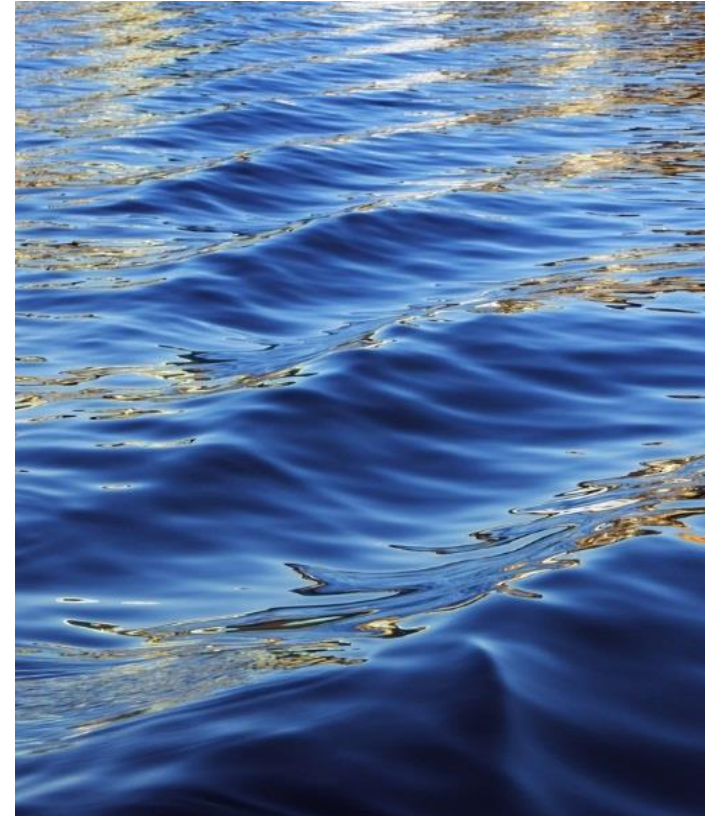


*San Luis Valley
Regional Science Fair*

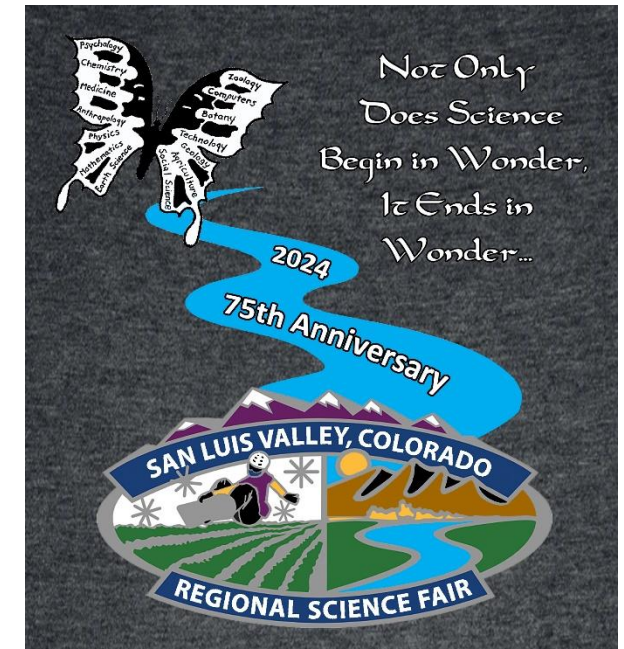
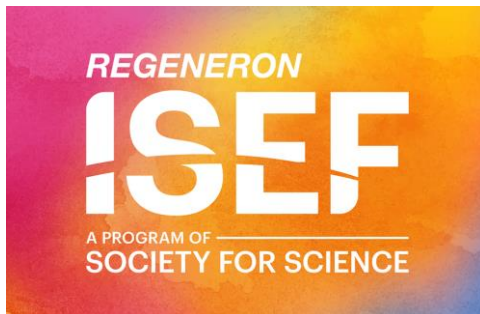
*Fall Orientation &
Rules Review*

2024-25



Agenda for Tonight...

- **5:30 pm - 6:00pm** - Welcome/Introductions/Guest Speaker (Hannah Thill, RGWCEI), SLVRSF Timeline
- **6:00pm - 7:00pm** - ISEF Updates, Forms, SRC and D&S Rules
- **7:00pm – 7:30pm** - Q & A from Teachers/Sponsors



Key Dates and Deadlines for the 2024-25 Fair Cycle

11/14/24 – 1st DRAFT Student Research Plan & Protocol forms due to SLVRSF SRC (via upload)

11/21/24 – Feedback from SLVRSF SRC on 1st submission

12/5/24 – 2nd DRAFT Student RP & Protocol forms due to SLVRSF SRC (2nd upload)

12/12/24 – Feedback from from SLVRSF SRC on 2nd submission

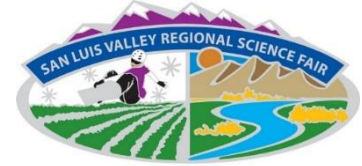
1/17/25 – FINAL SRC Paperwork Due to SLVRSF SRC

1/26/25 – FINAL SRC Checks on Forms and Approval for SLVRSF Competition

2/7/25 – Online Registration for SLVRSF

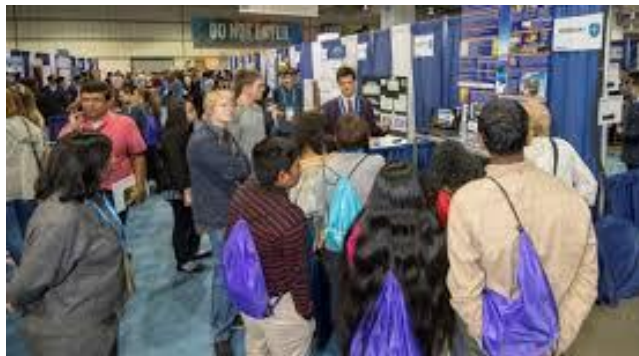
2/27 & 2/28/25 – SLV Regional Science Fair and Awards Ceremony

3/10/25 – State Qualifying Protocol Forms Due to CSEF



CSEF – April 3rd-5th, 2025

ISEF - Columbus, OH – May 11th -16th, 2025



Links to Helpful Resources

2025 ISEF Rules and Guidelines

<https://sspcdn.blob.core.windows.net/files/Documents/SEP/ISEF/2025/Rules/Book.pdf>

Rule Changes for 2025

<https://sspcdn.blob.core.windows.net/files/Documents/SEP/ISEF/2025/Rules/Changes-to-International-Rules-2024-2025.pdf>

ISEF Rules Wizard

<https://ruleswizard.societyforscience.org/>

Overview of Forms and Dates

<https://www.societyforscience.org/isef/overview-of-forms-and-dates/>

San Luis Valley Regional Science Fair

SLVRSF.org

Colorado Science & Engineering Fair

<https://csef.natsci.colostate.edu/>

International Science & Engineering Fair

<https://www.societyforscience.org/isef/>

Frequently Asked Questions

<https://www.societyforscience.org/isef/international-rules/faq/>

Display and Safety Rules

<https://www.societyforscience.org/isef/international-rules/display-safety-rules/>

Overview of Important Rules Changes – 2024-25

- In all locations referenced, the Designated Supervisor (DS) has now been changed to **DIRECT Supervisor (still DS)**, to reinforce the role of this person.
- **The Research Ethics Statement (which we ALL check the box that we've read!) now includes a direct reference to the use of Artificial Intelligence (AI) technology...**
 - "Integrity, honesty, objectivity, and avoidance of conflicts of interest are expected during every phase of the project. The project should reflect independent research done by the student(s) and presented in their own words with proper citation, most particularly if artificial intelligence is used. The project may only represent one year of work and must not include fraudulent data, plagiarism or inappropriate use of AI in presenting work that is not their own."*
- **In the Approval and Documentation section, there is now specific language and limitations about continuing to collect data after the student's Regional Fairs...**
 - "After competing in an Affiliated Fair, projects may not be changed or amended. However, additional data may be collected using the same methodology that was previously approved for the affiliated fair."*

Overview of Important Rules Changes, continued

- In the Human Participant rules, the word “advice” was added to the section that discusses how diagnosing any type of condition is prohibited (either in person, or via the use of an app).
- In the Potentially Hazardous Biological Agents (PHBA’s) rules, several small modifications were added related to following established laws, conditions of the use of BSL-2 labs, correct K-12 E. coli strain to use in exempt studies, transportation of Hazardous Chemicals, and specific language about the disposal of Hazardous Chemicals.
- In the Hazardous Chemicals, Activities, and Devices rules, there is new clarification on the difference between prescription drugs and controlled substances.
- New changes on Forms include:
 - New language about students writing Abstracts in their own words, and verification with plagiarism checkers
 - Minor change on Form 1A regarding teammates from different schools

Overview of Important Rules Changes, continued

- **New changes on Forms, continued...**
 - **Clarification in the Research Plan instructions about protocol changes prior to competing in an Affiliated Fair, and including a List of Materials**
 - **Reformatted and condensed Form 1C (Regulated Research Institutional/Industrial Settings) to fit on one page**
 - **Changes on Form 2 (Qualified Scientist) removing redundant statements**
 - **Reorganization of signature boxes on Form 5A (Vertebrate Animals)**
 - **Additional clarifying language on Form 6A (Potentially Hazardous Biological Agents)**
 - **Additional clarifying language on Form 6B (Human and Vertebrate Animal Tissue)**
 - **Streamlined instructions for Form 7 (Continuation/Research Progression of Projects)**

Levels of Projects & Forms Used

➤ Individual or Team Projects (up to 3 team members)

I. Elementary – 4th and 5th grade

- SLVRSF Elementary forms are modeled after CSEF/ISEF forms
- The goals are the same – good science and SAFETY

II. Junior – 6th through 8th grade

- Can use either ISEF forms or CSEF MS forms

III. Senior – 9th through 12th grade

- Must use ISEF forms

SLV Regional Science Fair, Inc.
Elementary Protocol Form 4th and 5th graders
Revised September, 2018

1) MUST be completed for ALL projects
Please check the research category in which your project belongs. CHECK ONLY ONE. Everyone must fill out pages one, two, three, four, five and six first.
2) Then you will fill out the forms listed in parentheses depending on the type of project you have.

RESEARCH CATEGORIES
General _____ Human Research _____ Non-human Vertebrate Animals _____
(Form 1A) (Forms 1A, 1B, 1C) (Forms 1A, 1D)
(Please Print or Type)

Student _____
School _____
Teacher _____ Grade _____
Home Address _____ Phone Number _____

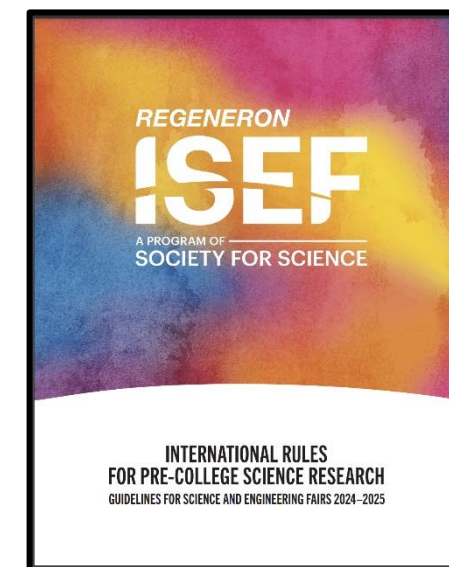
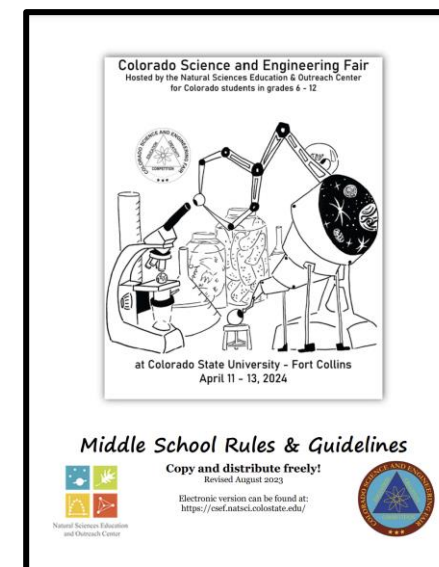
PROJECT TYPE:
____ Individual _____ Team

PROJECT CATEGORIES: CHECK THE CATEGORY OF YOUR PROJECT
____ Behavioral and Social Sciences _____ Engineering
____ Biomedical Sciences _____ Environmental Sciences
____ Botany _____ Mathematics and Computer Sciences
____ Chemistry _____ Physics
____ Consumer Sciences _____ Zoology
____ Earth and Space Sciences

Title of Project _____

Is this a team project? ____ Yes ____ No A team may have no more than three (3) students.
If yes, who is the leader of the team? _____
Please list other team members: _____

Team projects REQUIRE each student involved in the team to fill out the general protocol forms so that all signatures are in place. Then, please attach all papers together before sending in for approval.



Types of Committees...

IRB – Institutional Review Board...

- *Reviews human participant studies...*
- *Membership must include:*
 - *An educator*
 - *A school administrator*
 - *Someone knowledgeable about evaluating physical and/or psychological risk: MD, PA, RN, psychologist, licensed social worker, or licensed clinical counselor*

SRC – Scientific Review Committee...

- *REGIONAL Members must include...*
 - *A biomedical scientist with a Doctoral degree*
 - *An educator*
 - *At least one other member*
- *Appropriate LOCAL School SRC Members may include...*
 - *BA/BS or MA/MS Science majors*
 - *Science educators or Specialists with training and/or experience*

Every effort should be made to create LOCAL IRB and SRC teams!! The role of the Regional SRC team is to **DOUBLE-CHECK** the paperwork **AFTER** Local review and approval!

Adult Sponsors, Direct Supervisors, Parents, and Mentors cannot serve on their student's IRB/SRC teams (conflict of Interest)

Some Common Problems we discover during SRC Review...

Parts of the Form are blank or incomplete...

Solution: Be thorough, and check EVERY line and EVERY box! (avoid "N.A.")

Forms are from the wrong year, or are missing...

Solution: Use this year's forms and know which ones are needed for your student's project

Forms are unreadable...

Solution: Have students type their information (using Google Docs, DocHub or similar)

Copies of unnecessary Forms are included in submissions...

Solution: Only include the necessary forms, and remove the non-applicable ones

****It is ultimately the responsibility of the ADULT SPONSOR to ensure that the student's paperwork is complete and correct!!****

Checklist for Adult Sponsor (1)
This completed form is required for ALL projects.

Adult Sponsor In collaboration with the student researcher(s):

Student Checklist (1A)
This form is required for ALL projects.

Approval Form (1B)

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

Completed by Student and Parent
Acknowledgement:

Human Participants Form (4)

This form is 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.)

Overview of the Elementary Forms...

The complete set
of fillable PDF
forms can be found
on the SLVRSF
Website...

www.slvrfsf.org

Page 1

“Vital
Statistics”
Page

Form 1a MUST be completed for ALL projects

Please check the research category in which your project belongs. CHECK ONLY ONE.
Everyone must fill out pages one, two, three, four, and five first. In addition:
Students must fill out the forms, listed in parentheses below, their projects research category.

RESEARCH CATEGORIES

General Human Research Non-human Vertebrate Animals
Complete (Form 1A) Complete (Forms 1A, 1B, 1C) Complete (Forms 1A, 1D)

(Please Print or Type)

Student _____
Home Address _____ Phone Number _____
School _____
Teacher _____ Grade _____

PROJECT TYPE:

Individual Team

PROJECT CATEGORIES: CHECK THE CATEGORY OF YOUR PROJECT

Behavioral and Social Sciences Engineering
 Biomedical Sciences Environmental Sciences
 Botany Mathematics and Computer Sciences
 Chemistry Physics
 Consumer Sciences Zoology
 Earth and Space Sciences

Title of Project _____

Is this a team project? Yes No A team may have no more than three (3) students.

If yes, who is the leader of the team? _____

Please list other team members: _____

What Forms are REQUIRED for ALL Elementary projects?

- ✓ Page 1
- ✓ Page 2
- ✓ Page 3
- ✓ Page 4
- ✓ Page 5
- ✓ Page 6
(Form 1A)

Page 1

“Vital
Statistics”
Page

Form 1a MUST be completed for ALL projects

Please check the research category in which your project belongs. CHECK ONLY ONE.
Everyone must fill out pages one, two, three, four, and five first. In addition:
Students must fill out the forms, listed in parentheses below, their projects research category.

RESEARCH CATEGORIES

General Human Research Non-human Vertebrate Animals
Complete (Form 1A) Complete (Forms 1A, 1B, 1C) Complete (Forms 1A, 1D)

(Please Print or Type)

Student _____
Home Address _____ Phone Number _____
School _____
Teacher _____ Grade _____

PROJECT TYPE:

Individual Team

PROJECT CATEGORIES: CHECK THE CATEGORY OF YOUR PROJECT

Behavioral and Social Sciences Engineering
 Biomedical Sciences Environmental Sciences
 Botany Mathematics and Computer Sciences
 Chemistry Physics
 Consumer Sciences Zoology
 Earth and Space Sciences

Title of Project _____

Is this a team project? Yes No A team may have no more than three (3) students.

If yes, who is the leader of the team? _____

Please list other team members: _____

Detail, Detail, Detail!!

For Materials, follow this Template!...

- Number and Name of Item (brand), size (unit)

➤ Example...

- One Triple-beam Balance Scale (Ohaus), 2 kg capacity (+/- 0.1 g)

Team projects REQUIRE each student involved in the team to fill out General Forms, pages 1-5 and Form 1a so that all signatures are in place. Please attach all papers together before sending in for approval.

SCIENTIFIC METHOD STEPS

QUESTION: What is the question/problem, engineering goal that you are trying to answer?

PURPOSE: What are you trying to find out? What is your purpose in doing this project?

PREDICTION: What do you think will happen? What do you think the outcome of your experiment will be?

MATERIALS: List in detail all materials you will need in order to do your experiment. Number, name, and size of item(s) used is expected. For example, write 1 clear glass jar, stating the size of the jar, 8 ounces of tap water, etc. For each material, check whether it could be harmful. NOTE: If you need water in your experiment, use distilled or purified water if possible. Tap water left over 24 hours and water collected from lakes, ponds, etc., can be considered pathogenic. This will require that the experiment be done in a controlled environment under supervision of a trained adult. If you need soil, please use purchased potting soil.

1.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
8.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
9.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
10.		Possibly Harmful?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

**MORE Detail,
Detail, Detail!!**

***Mention EACH
Material somewhere
in your Procedures!***

***For References...
Many good
Templates are
available online 😊
Use one that works!***

If you listed any materials above as possibly harmful, you must write WHERE YOU WILL ACQUIRE THE MATERIALS AND WHAT SAFETY PRECAUTIONS WILL BE USED WHEN DEALING WITH THEM. PLEASE DO THIS ON Page 5 (Risk Assessment).



PROCEDURE: List step by step in great detail how you are going to carry out your experiment. The procedure must be written legibly and in order. If more space is needed, please attach additional paper.



Pages 3 & 4

**Research
Plan Part 2**

If you are unsure what to do, who can you go to for help about your project(s)?



LIST AT LEAST TWO REFERENCES FOR LIBRARY RESEARCH. References are required. Your protocol form will not be approved without these two entries. Date when information was retrieved is also required. No Wikipedia allowed.

1.



2.



Additional References:



At our SLV SRC, the Risk Assessment is generally the least detailed part of the paperwork, when it should be the most!


It's perhaps the most important form for SRC reviewers...

Address the Risks! How can the child get hurt? How can he/she hurt others? What can you do to prevent it? Tell us!

Risk Assessment Form (Think outside the box)

*This is a required page for ALL projects.

Identify and assess the risks involved in this project.



Describe the safety precautions and procedures that will be used to reduce the risks.



Describe the disposal of the procedures that will be used if applicable.



Page 5

Risk
Assessment

Roles of Adults with Elementary Projects...

The Parent

This person is generally the SUPERVISOR of the project, and must ensure the safety of the student

The Teacher

This person is the SPONSOR of the student, and is responsible for completing paperwork and knowing the rules

FORM 1A

MUST BE COMPLETED IF THIS IS A GENERAL RESEARCH PROJECT!!!!

By signing this form, student, parents and adult sponsors are verifying that they have read and understand the risks and possible dangers on working on this project and are consenting that the project can proceed.

Signature of student doing the project Date

I am the parent/guardian and will be the person supervising the project and will make sure all safety precautions are followed.

Signature of parent/guardian Date

Projects that use human beings in any way need to have a person with a science background (pharmacist, LPN, RN, veterinarian, biologist) etc., read and okay the procedure. This person is not supervising the project, but is stating the procedure/s is safe and correct.

Describe the safety precautions and procedures that will be used to reduce the risks. I am a _____ and have a science background. I have read the procedure and believe it to be safe if all safety precautions as listed and suggested are followed.

Signature of person with science background Date

I am the teacher of the student working on this project. I am teaching the student how to do a science fair project, but I am not actually supervising the actual experiment.

Signature of the classroom teacher Date

I am a member of the local school review committee. I have reviewed the project and consent that the project may now proceed.

Signature of the school review committee Date

Roles of Adults (cont.)

The Direct Supervisor

This person is generally an EXPERT, and has special training relating to the student's research...They must supervise the student during higher risk activities

DIRECT SUPERVISOR PAGE

Projects that could be considered to be pathogenic or have the potential for physical harm in any way will require the supervision of a trained adult in a controlled environment. Examples: use of chemicals, fire, firearms, construction of electrical devices, use of hazardous substances, use of water that is not purified, use of non-composted or contaminated soil, etc.

Studies involving the culturing of pathogenic agents in a home environment are strictly prohibited, but non-cultured specimens may be collected at home and transported to a lab for culturing.

I am a _____ and certify that I have been trained in the techniques to be used by the student. I will provide direct supervision of the project and will make sure that all safety precautions will be followed. The project will be performed at the following institution:

Agency _____

Address _____

Town _____ State _____ Zip _____

Printed name of designated science supervisor _____

Date _____

Title of supervisor _____

Position/institution _____

Address _____

List and describe your responsibilities in directly supervising the student. Include all hazardous substances and devices used in this research, safety precautions to be taken and the proper disposal proc



7 / 12



- All Human Subject projects must have their protocol approved BEFORE EXPERIMENTATION by an IRB/SRC

Form 1B

TO BE COMPLETED FOR HUMAN RESEARCH PROJECTS

All members of a team must have parental permission, so the form 1A is needed for all students.

Any research that involves the use of humans must have the human protocol form (form 1B) signed by the regional SRC BEFORE experimentation begins. Also, Informed Consent forms (form 1C) for EACH participant must be filled out BEFORE experimentation begins.

A copy of any test, survey, or questionnaire must be provided for parental review for any subject less than 18 years of age.

All signed informed consent forms MUST BE returned to the Regional Science Fair, during registration.

Note: Approval (parental signature) of this form indicates that the parent/guardian has given permission for the experiment to be done.

Verifying Signatures:

Student 

Parent/Guardian 

Teacher 

School SRC/IRB Committee  Date 

(School SRC/IRB please check one)

If working with children 18 and under, this MUST be marked "More Than Minimal Risk"

Minimal Risk Involved More Than Minimal Risk Involved Unacceptable Risk

Unacceptable Risk Projects will not be accepted.

Regional SRC  Date 

Page 8

Form 1B
Human
Research
Page

- All Human subjects **MUST** give Informed Consent to participate in the research...

- Minors cannot give Informed Consent...their parents must sign in their stead...

Form 1C

INFORMED CONSENT FORM
Student

First: Complete this form except for the signatures of the participant, participant's parent, and teacher's signature.

Second: Make copies of this form for each human participant in your project.

Third: Have each participant/participant's parent read the form and have the participant, the participant's parent, and the teacher sign the form.

Fourth: If a survey is used in the project, a copy of the survey MUST be included for parental review for subjects under 18 years of age.

1) List all materials used in your investigations. Are there any harmful materials? If so, which ones?W

2) What are the research procedures in which the human subjects will be involved? Be very specific and detailed.

Page 9

Form 1C
Informed
Consent

Form 1C (cont.)

Informed

Consent

Signatures

3) What are the possible risks and discomforts the subject may reasonably expect by participation in this research?

4) What are the procedures that will be used to minimize the risks?

Participant: I have read and understand the conditions stated above and consent to participate in this research procedure. I understand that I am free to withdraw my consent and to discontinue participation in this research activity at any time without prejudice toward myself.

Parent or guardian signature is needed if test subject is under the age of 18 or a protected special needs person.

<div style="background-color: #d9e1f2; height: 25px;"></div>	<div style="background-color: #d9e1f2; height: 25px;"></div>	
Student's Name	Student's Signature	Date
<div style="background-color: #d9e1f2; height: 25px;"></div>	<div style="background-color: #d9e1f2; height: 25px;"></div>	
Participant's Name	Participant's Signature	Date
<div style="background-color: #d9e1f2; height: 25px;"></div>	<div style="background-color: #d9e1f2; height: 25px;"></div>	
Participant's Parent's Name	Participant's Parent's Signature	Date
<div style="background-color: #d9e1f2; height: 25px;"></div>	<div style="background-color: #d9e1f2; height: 25px;"></div>	
Teacher's Name	Teacher's Signature	Date

- **Non-human vertebrates include most pets and livestock**
- **Even though most elementary vertebrate projects involve household pets, it is still important to be as detailed as possible when describing its housing and care.**

FORM 1D

TO BE USED FOR NON-HUMAN VERTEBRATE ANIMAL RESEARCH

1) Why is it necessary to use vertebrate animals in this project? (If you can do the project without vertebrate animals please do so.) Where will the animals be obtained?



2) How will the animals be cared for?

a) Food: What type of food and how often will they be fed and watered?



b) Care: What type of bedding will be used?



c) Location: Where will animals be housed?



d) What will happen to the animals after the completion of this project?



Page 11

Form 1D
Non-human
Vertebrates

- **Veterinary approval, supervision, and signatures will be required if testing involves invasive procedures such as blood draws, injections, etc.**
- **Animal and student safety is priority! Just because it's a pet doesn't mean it can be subjected to harmful or painful testing.**

READ THE FOLLOWING CAREFULLY:

- 1) Primary concern should be given to the humane treatment of animals.
- 2) The use of alcohol, acid rain, insecticide, herbicide and heavy metals in toxicity or behavioral studies on live vertebrates is prohibited.
- 3) NO surgery on animals will be permitted.
- 4) Unnecessary pain or discomfort to animals will result in disqualification from regional competition.
- 5) This form must be completed and approved by the Regional Scientific Review Committee BEFORE any research begins.
- 6) If the project is anything more than observational in a normal setting, or small changes such as hiding toys or treats, then the project needs to be cleared by a veterinarian. Examples of projects that must be pre-approved are food studies, excessive handling or cage stress, or drastically changing the animal's environment. If you are unsure if your project should be pre-approved, please check with your vet.

Note: Approval (parental signature) of this form indicates that the parent has given permission for the experiment to be done.

Verifying Signatures:

Student	<input type="text"/>	<input type="text"/>
	Printed Name	Signature
Parent/Guardian	<input type="text"/>	<input type="text"/>
	Printed Name	Signature
Teacher	<input type="text"/>	<input type="text"/>
	Printed Name	Signature
School Review Committee	<input type="text"/>	Date <input type="text"/>
Regional SRC	<input type="text"/>	Date <input type="text"/>
Adult supervising animal care	<input type="text"/>	Date <input type="text"/>
	(Name and Title)	
Address	<input type="text"/>	
Signature of Veterinarian	<input type="text"/>	Phone Number <input type="text"/>

Page 12

Form 1D
(cont.)

Non-human
Vertebrates
Signatures

Overview of Junior/Senior Forms...

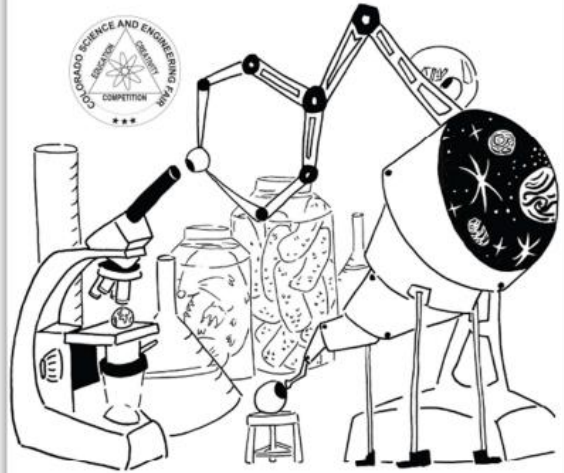
The complete set of forms can be found on the CSEF Website...

<https://csef.natsci.colostate.edu/>

For HS, the ISEF Website

<https://www.societyfor-science.org/isef/>

Colorado Science and Engineering Fair
Hosted by the Natural Sciences Education & Outreach Center
for Colorado students in grades 6 - 12





at Colorado State University - Fort Collins
April 11 - 13, 2024

Middle School Rules & Guidelines

Copy and distribute freely!
Revised August 2023

Electronic version can be found at:
<https://csef.natsci.colostate.edu/>



Natural Sciences Education and Outreach Center

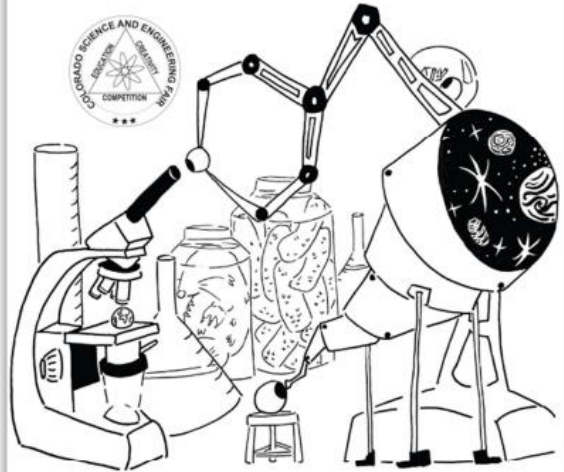
REGENERON
ISEF
A PROGRAM OF
SOCIETY FOR SCIENCE

INTERNATIONAL RULES
FOR PRE-COLLEGE SCIENCE RESEARCH
GUIDELINES FOR SCIENCE AND ENGINEERING FAIRS 2024-2025

What Forms are **REQUIRED** for **ALL Jr./Sen.** projects?

- ✓ Form 1
- ✓ Form 1A
- ✓ Form 1B
- ✓ Form 3

Colorado Science and Engineering Fair
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at Colorado State University - Fort Collins
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Natural Sciences Education
and Outreach Center



REGENERON
ISEF
A PROGRAM OF
SOCIETY FOR SCIENCE

**INTERNATIONAL RULES
FOR PRE-COLLEGE SCIENCE RESEARCH
GUIDELINES FOR SCIENCE AND ENGINEERING FAIRS 2024-2025**

Form 1

Adult Sponsor Checklist

The Adult Sponsor

This person is generally the SPONSOR (teacher) of the student and is responsible for paperwork and knowing the rules!

Middle School - Adult Sponsor Checklist Form (1)

This form is required for ALL projects and MUST be completed PRIOR to experimentation.

This form is to be completed by the Adult Sponsor in collaboration with the Student Researcher/Team Leader.

Student's Name(s): _____

Project Title: _____

- Adult Sponsor, please certify that you have reviewed the following with the Student Researcher and agree with them by **initialing each line**:
 - I have reviewed the Rules & Guidelines for Middle School Science Research that apply to this project.
 - I have reviewed the **completed** Student Researcher Checklist Form (1A).
 - I have read and reviewed the **proposed** Research Plan and have determined it is appropriate.
 - I have reviewed the **completed** Risk Assessment Form (3) and approve of the chosen Designated Supervisor.
- The Student Researcher **will** / **will not** employ the expertise of a Qualified Scientist/Mentor. If yes, a Qualified Scientist/Mentor Form 2 is required. Please note, that the school/local SRC or IRB **may require** a student to work with a Qualified Scientist.
- The Student Researcher **will** / **will not** work on the project at a Regulated Research Institution (i.e. university or college) or an Industrial Setting (i.e. hospital, water treatment plant, private lab, etc.). If yes, a Regulated Research Institution/Industrial Setting Form 1C will be required AFTER the project is completed.
- This project **is** / **is not** a continuation/progression from a previous year. If yes, a Continuation Form 7 is required along with all previous years' abstracts and research plans.
- This project **does** / **does not** involve human testing of a student deigned invention, prototype or computer application. If yes, #6 needs to be marked for Human Subjects and Form 4 must be completed.
- This project **does** / **does not** involve one or more of the following, requiring PRIOR approval by an SRC and/or an IRB. **Please check all that apply**:
 - Human Subjects** – Projects involving human subjects require PRIOR approval by an IRB and the following:
 - Human Participants Form 4 **AND POSSIBLY**
 - Unsigned Sample of Informed Consent Form (if required by the IRB) **AND POSSIBLY**
 - Qualified Scientist/Mentor Form 2 (if required by the IRB)
 - Vertebrate Animals** – Projects involving vertebrate animals require the following:
 - Vertebrate Animal Form 5A – if project is conducted at school, home or in a field setting; PRIOR school/local SRC approval is required in this case **OR**
 - Vertebrate Animal Form 5B – if project is conducted at a Regulated Research Institution; PRIOR Institutional Animal Care and Use Committee (IACUC) approval is required in this case **AND POSSIBLY**
 - Qualified Scientist/Mentor Form 2 (if required by the SRC)
 - Potentially Hazardous Biological Agents** – Projects involving microorganisms (known and unknown), rDNA and human or animal tissue require PRIOR approval by either the school/local SRC or university regulatory board and the following:
 - Potentially Hazardous Biological Agents Risk Assessment Form 6A **AND POSSIBLY**
 - Human and Vertebrate Animal Tissue Form 6B (to be completed along with Form 6A when a project involves fresh or frozen tissue, primary cell cultures, blood, blood products and bodily fluids) **AND POSSIBLY**
 - Qualified Scientist/Mentor Form 2 (if required by the SRC)

I attest to the information checked above and that I have read and agree to abide by the science fair ethics statement found on Page 4.

Adult Sponsor's Printed Name	Adult Sponsor's Signature	Date of Review (mm/dd/yy)
Phone Number	Email	

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: _____

- I have reviewed the ISEF Rules and Guidelines, including the science fair ethics statement.
- I have reviewed the student's completed Student Checklist (1A) and Research Plan/Project Summary.
- I have worked with the student and we have discussed the possible risks involved in the project.
- 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
- Items to be completed for **ALL PROJECTS**
 - Adult Sponsor Checklist (1)
 - Student Checklist (1A)
 - Regulated Research Institutional/Industrial Setting Form (1C) (when applicable; after completed experiment)
 - Continuation/Research Progression Form (7) (when applicable)
 - Research Plan/Project Summary
 - Approval Form (1B)

Additional forms required if the project includes the use of one or more of the following (check all that apply):

- Humans**, including student designed inventions/prototypes. (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 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)
 - 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, projects using color change coliform water test kits, microbial fuel cells, and projects involving decomposing vertebrate organisms.
- 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)
- Other**
 - Risk Assessment Form (3)
- I attest to the information checked above and that I have read and agree to abide by the science fair ethics statement.

Adult Sponsor's Printed Name	Signature	Date of Review (mm/dd/yy)
Phone	Email	

Form 1A

Student Checklist

This form *frequently* has missing or incorrect information

- Emails, phone #s
- Start Dates *cannot* be before necessary approval signatures!

Middle School - Student Researcher Checklist Form (1A)
This form is required for ALL projects and MUST be completed PRIOR to experimentation.

This form is to be completed by the Student Researcher/Team Leader before submitting it with the Research Plan, Approval Form 1B, Risk Assessment Form 3 and other relevant forms to the Adult Sponsor for approval.

- This project will be an Individual / Team project. The student(s) working on this project will be:
Individual/Team Leader: _____ Grade: _____
Email: _____ Phone: _____
Team Member 1: _____ Grade: _____
Team Member 2: _____ Grade: _____
- Project Title: _____
- School: _____ School Phone: _____
School's Physical Address: _____
- Adult Sponsor: _____ Email: _____
MUST match person signing Form 1!
- This project does / does not require PRIOR SRC or IRB approval.
- I/We plan on starting our experimentation/data collection/engineering of the project on: _____ (mm/dd/yy)
- This project is / is not a continuation or progression from a previous year. If yes, a Continuation/ Progression Form 7 is required along with all previous years' abstracts and research plans.
- The **ACTUAL** experimentation/data collection/engineering designing began and ended on the following dates (this can be filled in once the project is completed):
ACTUAL Start Date (mm/dd/yy) _____ ACTUAL End Date (mm/dd/yy) _____
- I/We will be conducting experimentation at the following work site(s):
(check ALL that apply & explain in the Research Plan)
 Research Institution School Field Home Other: _____
- I/We will be getting our data from the following sources:
 Collected by self/mentor Other: _____
(please describe or give URL)
- Non-school and non-home work site **physical address(es)** are:
(regulated research institutions, industrial settings, field sites – attach additional pages as needed)
Site 1 Name: _____ Site 2 Name: _____
Site 1 Address: _____ Site 2 Address: _____
Site 1 Phone Number: _____ Site 2 Phone Number: _____
Site 1 Email: _____ Site 2 Email: _____

Prepare a Research Plan following the instructions on page 10 and attach to this form for review.

Student Checklist (1A)
This form is required for ALL projects.

- a. Student/Team Leader: _____ Grade: _____
Email: _____ Phone: _____
b. Team Member: _____ c. Team Member: _____
- Title of Project: _____
- School: _____ School Phone: _____
(if multiple schools, list of the team leader or list all schools).
School Address: _____
- Adult Sponsor: _____ Phone/Email: _____
- Does this project need SRC/IRB/IACUC or other pre-approval? Yes No Tentative start date: _____
- 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)
- This year's experimentation/data collection:
Actual Start Date: (mm/dd/yy) _____ End Date: (mm/dd/yy) _____
- Where will you conduct your experimentation? (check all that apply)
 Research Institution School Field Home Other: _____
- Source of Data:
 Collected self/mentor Other Describe/url: _____
- List the name and address of all non-home and non-school work site(s), whether you worked there virtually or on-site:
Name _____
Address: _____
Phone/email _____
- Complete a Research Plan/Project Summary following the Research Plan/Project Summary instructions and attach to this form.**
- An abstract is required for all projects after experimentation.**

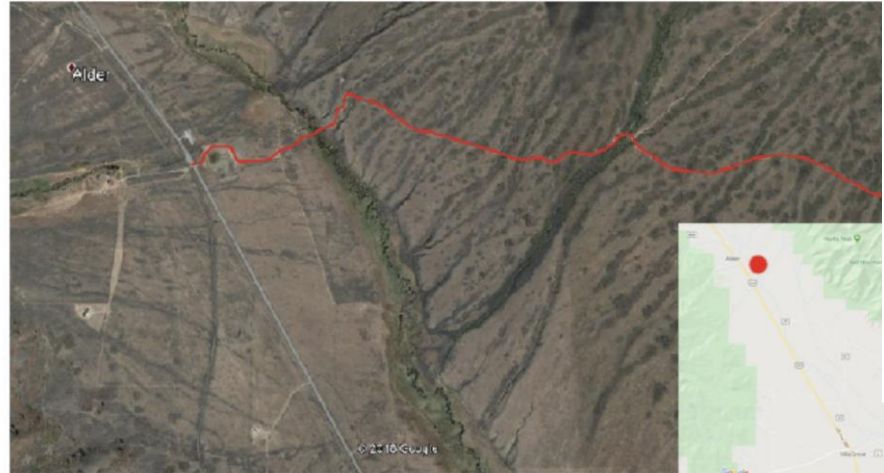
Form 1A

Student Checklist Attachments

- **Make sure to include Addresses and/or Maps for ALL non-school or non-home locations! (labs, hospitals, field sites, etc.)**
- **Maps should include sample waypoints and descriptions of how to get to the site from known landmarks**
- **Maps should be attached to the 1A Form**

Andres Villa - Form 1A Attachment - 2019-20

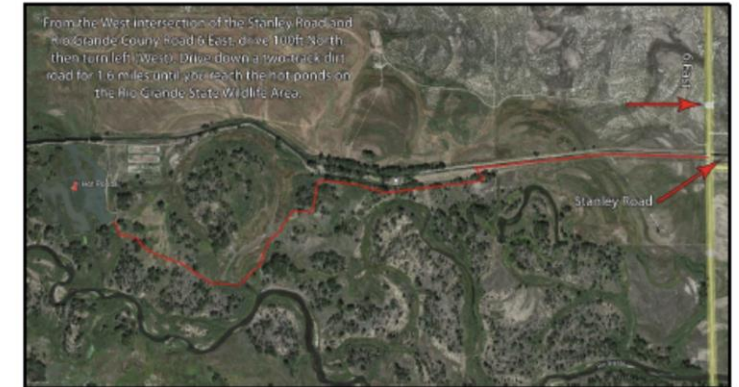
At approximately 10 miles N of Villa Grove, Saguache County, CO, take a right off Highway 285 onto Merit Creek Rd. At the first Y intersection, take a left, at the next intersection, keep right on road. Follow this road until the next Y intersection, where you will keep right again, and at approximately 2 3/4 miles from the highway will be the end of the extent of the research area. Research will be conducted up to one mile N and S of the road.



Student Checklist 1A - Attachment - Marissa L. Martinez - 2022-23

Field Site Locations

The Efficacy of Abiotic/Biotic Factors and Trap Design for Effective Capture of Invasive American Bullfrog Tadpoles (*Lithobates catesbeianus*)



Research Plans

Research plans need to be HIGHLY DETAILED, particularly with the Materials and Procedures of the project!

- Amounts of material!
- Types of material!
- Maps!
- Website sources for MSDS Sheets!
- Permission Letters!
- Licenses/Certifications!

Middle School - Research Plan Instructions

A typed, detailed research plan is required for ALL projects and MUST accompany the Student Researcher Checklist Form (1A) and Risk Assessment Form (3) and be completed PRIOR to experimentation.

The Research Plan is a brief, but detailed explanation of the rationale behind the project idea, the research question(s), the procedures/methodology, the risk assessment and background exploration. This MUST be completed PRIOR to experimentation in order to be approved by the Adult Sponsor and the SRC/IRB (if required). Any changes to this plan MUST be documented (make an amendment to the original document) and approved by the Adult Sponsor and the SRC/IRB (if required) before work can continue on the project.

The research plan for ALL projects MUST include the following parts:

1. What is the **rationale/reason** for doing this project? Include a brief summary of the background research you did in relation to your project and explain why this research is important scientifically and, if applicable, any impacts to society in general your research has.
2. State your **hypothesis(es)**, **research question(s)**, **engineering goal(s)**, and/or **expected outcomes** (predictions) for your project. Be sure these tie into your rationale/reason.
3. Detail ALL to include please explain
4. Identify A completing for your pr
5. Describe t question(s)
6. List the m: you read i vertebrate : [that Wikipedia than five.](#)

If your project inc (microorganisms,

Middle School - Research Plan Instructions cont.

A typed, detailed research plan is required for ALL projects and MUST accompany the Student Researcher Checklist Form (1A) and Risk Assessment Form (3) and be completed PRIOR to experimentation.

Human Subjects: Prior IRB approval and Form 4 *are* required. An Informed Consent Form and Qualified Scientist/Mentor (Form 2) *may* be required by the IRB.

- a. Describe in general the type of people who will participate in your study (age range, gender, racial/ethnic composition, etc.).
- b. How will you recruit your participants? How will they be invited to participate?
- c. What exactly will the participants be asked to do? Include any surveys, questionnaire or test questions that you plan on using. How often and for how long will each participant be asked to commit to?
- d. What are the potential risks or discomforts (*remember to think about emotional as well as physical*) to the participants? How will you minimize those risks?
- e. What are the potential benefits to the individual participants as well as to society in general?
- f. Will you be collecting any identifiable information (i.e. name, age, grade, phone numbers, birth dates, emails, etc.)? Is this a confidential or anonymous study?
Confidential studies may collect identifiable information, but must be kept separate from the data being analyzed using a number key that only the researcher and adult sponsor has access to.
Anonymous studies don't collect any identifiable information along with the study so that not even the researcher or adult sponsor knows who gave what answers.
- g. How will you 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? This can be done via an Informed Consent Form or on the survey directly if informed consent is not required by the IRB.

Vertebrate Animals: Prior SRC approval and Form 5A or 5B *are* required. A Qualified Scientist/Mentor Form 2 *may* be required by the SRC.

- a. Briefly discuss potential ALTERNATIVES to vertebrate animal use in your project and a detailed justification for using vertebrate animals. Explain the potential impact or contribution to society this project may have.
- b. All procedures must be DETAILED and include methods used to minimize potential discomfort, distress, pain and injury to the animals during experimentation. If chemicals or drugs are used, concentrations and dosages MUST be exact.
- c. What is the species, strain, sex, age, etc. of the animals being used? How many animals will you be using in the study and why is that number appropriate? What is the source of the animals?
- d. Where will the animals be housed (cage/housing size, bedding, etc.). What will be included in the daily care of the animals (food, water, exercise, etc.)?
- e. What will happen to the animals at the end of the study?

Potentially Hazardous Biological Agents: Prior SRC approval and Form 6A *are* required. A Form 6B and Qualified Scientist/Mentor (Form 2) *may* be required.

- a. What biological agent (microorganism, rDNA, tissue, cell line, etc.) are you using and where did it come from?
- b. What Biosafety Level did you determine your project involved and why?
- c. How are you going to keep yourself and others in the lab safe while you are working with the biological agents?
- d. How are you going to dispose of the biological agents once your project is complete?

Research Plan/Project Summary Instructions

A complete Research Plan/Project Summary is required for ALL projects and must accompany Student Checklist (1A).

- All projects must have a Research Plan/Project Summary
 - a. The Research Plan is to be written prior to experimentation following the instructions below to detail the rationale, research question(s), methodology, and risk assessment of the proposed research.
 - b. If changes are made during the research prior to competing in an affiliated fair, such changes can be added to the original research plan as an addendum, recognizing that some changes may require returning to the IRB or SRC for appropriate review and approvals. If no additional approvals are required, this addendum serves as a project summary to explain research that was conducted.
 - c. If no changes are made from the original research plan, no project summary is required.
 - Some studies, such as an engineering design or mathematics projects, will be less detailed in the initial project plan and will change through the course of research. If such changes occur, a project summary that explains what was done is required and can be appended to the original research plan.
 - The Research Plan/Project Summary should include the following:
 - a. **RATIONALE:** Include a brief synopsis of the background that supports your research problem and explain why this research is important and if applicable, explain any societal impact of your research.
 - b. **RESEARCH QUESTION(S), HYPOTHESIS(ES), ENGINEERING GOAL(S), EXPECTED OUTCOMES:** How is this based on the rationale described above?
 - c. Describe the following in detail:
 - **List of materials:**
 - **Procedures:** Detail all procedures and experimental design including list of materials, methods for data collection, and when applicable, the source of data used. Describe only your project. Do not include work done by mentor or others.
 - **Risk and Safety:** Identify any potential risks and safety precautions needed.
 - **Data Analysis:** Describe the procedures you will use to analyze the data/results.
 - d. **BIBLIOGRAPHY:** List 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.

Items 1-4 below are subject-specific guidelines for additional items to be included in your research plan/project summary as applicable.

1. **Human participants research:**
 - a. **Participants:** Describe age range, gender, racial/ethnic composition of participants. Identify vulnerable populations (minors, pregnant women, prisoners, mentally disabled or economically disadvantaged).
 - b. **Recruitment:** Where will you find your participants? How will they be invited to participate?
 - c. **Methods:** What will participants be asked to do? Will you use any surveys, questionnaires or tests? If yes and not your own, how did you obtain? Did it require permissions? If so, explain. What is the frequency and length of time involved for each subject?
 - d. **Risk Assessment:** What are the risks or potential discomforts (physical, psychological, time involved, social, legal, etc.) to participants? How will you minimize risks? List any benefits to society or participants.
 - e. **Protection of Privacy:** Will identifiable information (e.g., names, telephone numbers, birth dates, email addresses) be collected? Will data be confidential/anonymous? If anonymous, describe how the data will be collected. If not anonymous, what procedures are in place for safeguarding confidentiality? Where will data be stored? Who will have access to the data? What will you do with the data after the study?
 - f. **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:**
 - a. Discuss potential ALTERNATIVES to vertebrate animal use and present justification for use of vertebrates.
 - b. Explain potential impact or contribution of this research.
 - c. Detail all procedures to be used, including methods used to minimize potential discomfort, distress, pain and injury to the animals and detailed chemical concentrations and drug dosages.
 - d. Detail animal numbers, species, strain, sex, age, source, etc., include justification of the numbers planned.
 - e. Describe housing and oversight of daily care.
 - f. Discuss disposition of the animals at the end of the study.
- **Potentially hazardous biological agents research:**
 - a. Give source of the organism and describe BSL assessment process and BSL determination.
 - b. Detail safety precautions and discuss methods of disposal.
4. **Hazardous chemicals, activities & devices:**
 - a. Describe Risk Assessment process, supervision, safety precautions and methods of disposal.
 - b. Material Safety Data Sheets are not necessary to submit with paperwork.

Form 1C

Regulated Research Institution Page

Middle School - Research Institution/Industrial Setting Form (1C)

This form is only required for those projects conducted at a work site that is not a school, home or field and MUST be completed AFTER experimentation.

This form is to be completed by the supervising adult who is affiliated with the regulated research institution, industrial setting or any work site other than home, school or field and who has first-hand knowledge of the student's work done there. **The Student Researcher/Team Leader should NOT complete any part of this form!**

Student's Name(s): _____
Project Title: _____

1. I or my proxy (grad student, postdoc, emp the Student Researcher.
 - a. If no, describe your and/or your institu supervised use of equipment on site w

- b. If yes, complete questions 2 – 5 and co
2. The Student Researcher's project **is /** to detail how the student's project was si project is under a grant and needs to be ac

3. Describe the independence and creativity
 - a. developed the expected outcomes or e

- b. designed the methodology for his/her r

- c. analyzed and interpreted the data.

2023/2024

Middle School - Research Institution/Industrial Setting Form (1C) Continuation

Student's Name(s): _____

4. Detail the Student Researcher's role in conducting the research (data collection, specific procedures performed, etc.). Differentiate what the Student Researcher observed and what the Student Researcher actually did.

5. The Student Researcher **did / did not** work on the project as a part of a research group. If yes, how many individuals were in the group and who were they (high school students, graduate students, faculty, professional researchers, etc.)?

Institution Representative:

I attest that the Student Researcher has conducted the work as indicated above and that any required review and approval by institutional regulatory boards (IRB/IACUC/IBC) has been obtained. Copies are attached if applicable.

I further acknowledge that the Student Researcher will be presenting this work publicly in competition and I have communicated with the Student Researcher regarding requirements for my review and/or restrictions of what is publicized.

_____	_____	_____
Supervising Adult's Printed Name	Supervising Adult's Signature	Date of Signature (mm/dd/yy)
_____	_____	_____
Institution	Title	
_____	_____	
Email	Phone Number	

2023/2024

Revised-Regulated Research Institutional/Industrial Setting Form (1C)

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

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 be on the form as it is required to be displayed at student's project booth; please do not print double-sided.)

Research was supported at my work site:

1. Describe the student experience at your work site (check all that apply):
 - Used Equipment Yes No
 - Minimal interaction with our group Yes No
 - Mentored by me or someone else from our group Yes No
 - Worked as a sub-set of our ongoing research Yes No
 - Had an independent project from our group Yes No

2. Please describe the independent and/or creative work done by the student in any phase of the project, but particularly in developing the hypotheses or engineering goals of the project

3. Detail the student's role in conducting the research (e.g. data collection, specific procedures performed). Differentiate what the student observed and the student actually did.

4. Did the student(s) work on the project as part of a group? Yes No
Were there other high school students present? If yes, please list the students names and describe how their work was related or different from the work of this project.

5. If this project is under a grant and needs to be acknowledged, please list the grant statement here.

I attest that the student has conducted the work as indicated above and that any required review and approval by institutional regulatory board (IRB/IACUC/IBC) has been obtained. Copies are attached if applicable. I further acknowledge that the student will be presenting this work publicly in competition and I have communicated with the student research regarding any requirements for my review and/or restrictions of what is publicized.

_____	_____	_____
Direct Supervisor's Printed Name	Signature	Title
_____	_____	_____
Institution	Date Signed (must be after experimen- tation) (mm/dd/yy)	
_____	_____	
Address	Email/Phone	

International Rules: Guidelines for Science and Engineering Fairs 2024-2025, societyforscience.org/ISEF

Page 35

Page 15

Form 2

Qualified Scientist Form

The Qualified Scientist

This person should have a Doctoral/professional degree in the subject area related to the student's research, or have applicable expertise and approval from the local SRC.

Middle School - Qualified Scientist/Mentor Form (2)

This form MAY BE required for projects involving human subjects, vertebrate animals and/or potentially biological agents and MUST be completed PRIOR to experimentation.

This form is to be completed by the Qualified Scientist or Mentor who is advising and/or supervising the Student Researcher(s) on the project and has expertise in the area of research. **The Student Researcher/Team Leader should NOT complete any part of this form!**

Student's Name(s): _____

Project Title: _____

1. Qualified Scientist/Mentor's Name: _____

2. Educational Background _____ Degree(s): _____

3. My **experience/training** as it relates to the Student Researcher's project includes: _____

4. Institution: _____ Position: _____

5. Email: _____ Phone Number: _____

6. I **have** / **have not** reviewed the Rules and Guidelines for Middle School Science Research relevant to the Student Researcher's project. If not, please attach an explanation as to why.

7. The following will be used as part of this research project (check ALL that apply)
- | | |
|---|---|
| <input type="checkbox"/> Human Subjects | <input type="checkbox"/> DEA-controlled Substances |
| <input type="checkbox"/> Vertebrate Animals | <input type="checkbox"/> Tissues (including blood and blood products) |
| <input type="checkbox"/> Microorganisms | <input type="checkbox"/> Hazardous Substances/Devices |
| <input type="checkbox"/> None of the Above | |

8. This project **is** / **is not** a subset of a larger study.

9. I **will** / **will not** directly supervise the Student Researcher during experimentation.

a. If not, who will DIRECTLY supervise the Student Researcher? _____

b. The **experience/training** of the Designated Supervisor as it relates to the project includes: _____

Qualified Scientist/Mentor: I certify that I have reviewed and approved the Research Plan PRIOR to the start of experimentation. I will ensure that the Student Researcher(s) and/or Designated Supervisor(s) are trained in the necessary procedures related to the project. I will provide advice and supervision during the research. I have a working knowledge of the techniques to be used by the Student Researcher(s) as outlined in the Research Plan. I understand that a Designated Supervisor is required when I am not available to directly supervise the Student Researcher(s).	
_____ Scientist/Mentor's Printed Name	_____ Date of Approval
_____ Scientist/Mentor's Signature	_____ Date of Approval

Designated Supervisor: <i>To be used ONLY when the Qualified Scientist/Mentor is unavailable to directly supervise the student(s).</i> I certify that I have reviewed the Research Plan and have been trained in the techniques to be used by the Student Researcher(s) and I will provide DIRECT supervision during experimentation.	
_____ Designated Supervisor's Printed Name	_____ Date of Approval
_____ Designated Supervisor's Signature	_____ Date of Approval
_____ Email	

Qualified Scientist Form (2)

May be required for research involving human participants, vertebrate animals, potentially hazardous biological agents, and hazardous substances and devices. 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: _____ Email/Phone: _____

- Have you reviewed the ISEF rules relevant to this project and the science fair ethics statement relevant to this project? Yes No
- Will any of the following be used?
 - Human participants Yes No
 - Vertebrate animals Yes No
 - Potentially hazardous biological agents (microorganisms, rDNA and tissues, including blood and blood products) Yes No
 - Hazardous substances and devices Yes No
- Will this study be a sub-set of a larger study? Yes No
- Will you directly supervise the student? Yes No

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 Direct 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.	
_____ Qualified Scientist's Printed Name	_____ Date of Approval (mm/dd/yy)
_____ Signature	_____ Date of Approval (mm/dd/yy)

To be completed by the Direct 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.	
_____ Direct Supervisor's Printed Name	
_____ Experience/Training of Designated Supervisor	
_____ Signature	_____ Date of Approval (mm/dd/yy)
_____ Phone	_____ email

Form 3

Risk Assessment

The completion of this form should be a COLLABORATION between the AS/DS/QS and the Student!

- Detail, Detail, Detail for EVERY line item!
- Address ALL significant Risks! If you're not sure if its significant, ask us.. 😊
- If the space provided isn't enough, attach a separate sheet
- Provide relevant sources for safety info... (MSDS [don't attach!], manufactures website, online safety websites, etc.)

Middle School - Risk Assessment Form (3)
This form is required for ALL projects and MUST be completed PRIOR to experimentation.

This form is to be completed by the Student Researcher/Team Leader in collaboration with the Adult Sponsor, Designated Supervisor and/or Qualified Scientist/Mentor. All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____
Project Title: _____

- HAZARDS:** List ALL dangerous activities, hazardous devices, chemicals (household AND laboratory) and/or microorganisms exempt from pre-approval that are to be used in this project.

- RISKS:** Identify the risks involved in using ALL items listed in question #1. (*What is the worst that could happen if something went wrong when working on your project?*)

- SAFETY:** Describe the safety precautions you are going to take in order to minimize/reduce the risks identified in question #2. (*How are you going to keep yourself and others around you safe while you are working on your project?*)

- DISPOSAL:** Describe the disposal procedures you will use (when applicable) for items listed in question #1 (*How are you going to SAFELY dispose of any hazardous items used in the project?*)

- SOURCES:** List the source(s) of your safety information (in works cited format). Material Safety Data Sheets MUST be referenced when using chemicals (household AND laboratory.), but not attached.

Designated Supervisor:
I agree with the risk assessment and safety precautions described above. I certify that I have thoroughly reviewed the Research Plan and will provide **DIRECT supervision** of the Student Researcher(s) during experimentation.

Supervising Adult's Printed Name	Supervising Adult's Signature	Date of Review (mm/dd/yy) (MUST be PRIOR to experimentation)
Relation to Student Researcher(s)	Email	

Experience/Training as it relates to the project:

Risk Assessment Form (3)
Must be completed before experimentation; recommended for all projects. May be required for projects involving Human Participants, Hazardous Chemicals, Materials or Devices or Potentially Hazardous Biological Agents.

Student's Name(s) _____
Title of Project _____

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

- Identify and assess the risks and hazards involved in this project.
- a) List all hazardous chemicals, activities or devices to be used; b) identify and list all microorganisms to be used that are exempt from pre-approval (see Potentially Hazardous Biological Agent rules).
- Describe the safety precautions and procedures that will be used to reduce the risks.
- Describe the specific disposal procedures that will be used (when applicable).
- List the source(s) of safety information.

To be completed and signed by the Direct 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 the International Rules, including the science fair ethics statement and will provide direct supervision.

Direct Supervisor's Printed Name	Signature	Date of Review (mm/dd/yy)
Experience/Training as relates to the student's area of research		
Position/Institution	Phone or email contact information	

Form 3

Risk Assessment

The Direct Supervisor

This person should be engaged in DIRECT SUPERVISION of the student during experimentation, have enough expertise to ensure a safe environment.

Middle School - Risk Assessment Form (3)
This form is required for ALL projects and MUST be completed PRIOR to experimentation.

This form is to be completed by the Student Researcher/Team Leader in collaboration with the Adult Sponsor, Designated Supervisor and/or Qualified Scientist/Mentor. All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____
Project Title: _____

- HAZARDS:** List ALL dangerous activities, hazardous devices, chemicals (household AND laboratory) and/or microorganisms exempt from pre-approval that are to be used in this project.

- RISKS:** Identify the risks involved in using ALL items listed in question #1. (*What is the worst that could happen if something went wrong when working on your project?*)

- SAFETY:** Describe the safety precautions you are going to take in order to minimize/reduce the risks identified in question #2. (*How are you going to keep yourself and others around you safe while you are working on your project?*)

- DISPOSAL:** Describe the disposal procedures you will use (when applicable) for items listed in question #1 (*How are you going to SAFELY dispose of any hazardous items used in the project?*)

- SOURCES:** List the source(s) of your safety information (in works cited format). Material Safety Data Sheets MUST be referenced when using chemicals (household AND laboratory.), but not attached.

Designated Supervisor:
I agree with the risk assessment and safety precautions described above. I certify that I have thoroughly reviewed the Research Plan and will provide **DIRECT supervision** of the Student Researcher(s) during experimentation.

Supervising Adult's Printed Name	Supervising Adult's Signature	Date of Review (mm/dd/yy) (MUST be PRIOR to experimentation)
Relation to Student Researcher(s)	Email	

Experience/Training as it relates to the project:

Risk Assessment Form (3)
Must be completed before experimentation; recommended for all projects. May be required for projects involving Human Participants, Hazardous Chemicals, Materials or Devices or Potentially Hazardous Biological Agents.

Student's Name(s) _____
Title of Project _____

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

- Identify and assess the risks and hazards involved in this project.

- a) List all hazardous chemicals, activities or devices to be used; b) identify and list all microorganisms to be used that are exempt from pre-approval (see Potentially Hazardous Biological Agent rules).

- Describe the safety precautions and procedures that will be used to reduce the risks.

- Describe the specific disposal procedures that will be used (when applicable).

- List the source(s) of safety information.

To be completed and signed by the Direct 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 the International Rules, including the science fair ethics statement and will provide direct supervision.

Direct Supervisor's Printed Name	Signature	Date of Review (mm/dd/yy)
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Experience/Training as relates to the student's area of research

Position/Institution	Phone or email contact information
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Form 3

Risk Assessment Attachment

Not enough room on the Risk Assessment?...

Consider using an attachment!

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

Risk Assessment Form (3) Attachment

Student's Name:

Title of Project:

1. Identify and assess the risks and hazards involved in this project.
 -
2. a) List all hazardous chemicals, activities, or devices to be used; b) identify and list all microorganisms to be used that are exempt from pre-approval (see Potentially Hazardous Biological Agent rules).
 - Chemicals*
 -
 - Activities/Devices*
 -
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.

Form 4

Human Participants

✓ All Human Subject projects must have their protocols approved PRIOR TO EXPERIMENTATION by an IRB/SRC

Middle School - Human Subjects Form (4)

This form is required for ALL projects involving human subjects and MUST be completed and approved by the IRB PRIOR to experimentation.

To be completed by the Student Researcher/Team Leader in collaboration with the Adult Sponsor.

Student's Name(s): _____
Project Title: _____
Adult Sponsor: _____ Email: _____

- Attached to this form is the Research Plan, which addresses ALL areas under the Human Subjects section of the Research Plan Instructions (page 10).
- This project will / will not include giving my human participants any surveys, questionnaires, tests, photos, videos, or other items to view or complete. If yes, a copy of ALL such materials MUST be submitted to the IRB for review.
- This project will / will not include any published instrument(s) If yes, documentation of my permission to use such material is attached.
- Attached is a copy of an Informed Consent Form that I/we will use, if required by the IRB.
- I/We will / will not be working with a Qualified Scientist/Mentor. If yes, a copy of the Qualified Scientist/Mentor Form 2 is attached.

To be completed by the Institutional Review Board (IRB) after review of the research plan. All questions must be answered for the approval to be valid. (DO NOT sign 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 5 must be answered to be valid):

- Risk Level (check one): Minimal Risk More than Minimal Risk
- Qualified Scientist/Mentor Required: Yes No
- Written Minor Assent Required (for participants under the age of 18):
 Yes No Not Applicable (no minors used in this study)
- Written Parental Permission Required (for participants under the age of 18):
 Yes No Not Applicable (no minors used in this study)
- Written Informed Consent Required (for participants 18 years and older):
 Yes No Not Applicable (no participants over 18 used in this study)

I attest that I have reviewed the Student Researcher's project, that ALL of the above have been properly marked indicating the IRB determination and that I agree with the decisions. None of the individuals signing below may be the adult sponsor, designated supervisor, qualified scientist/mentor or a relative of the Student Researcher(s) (conflict of interest).

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

Printed Name: _____ Degree/Professional License: _____
Signature: _____ Date of Approval (must be PRIOR to experimentation): _____

Educator:

Printed Name: _____ Degree/Professional License: _____
Signature: _____ Date of Approval (must be PRIOR to experimentation): _____

School Administrator: (school principal or assistant principal)

Printed Name: _____ Degree/Professional License: _____
Signature: _____ Date of Approval (must be PRIOR to experimentation): _____

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 recruitment or data collection.)

Student's Name(s) _____ Title of Project _____
Adult Sponsor _____ Phone/Email _____

MUST BE COMPLETED BY STUDENT RESEARCHER(S) IN COLLABORATION WITH THE ADULT SPONSOR/DIRECT SUPERVISOR/QUALIFIED SCIENTIST:

- 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.
- 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.
- I have attached an informed consent that I would use if required by the IRB.
- 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) (a risk assessment form 3 is required).

- Risk Level (check one): Minimal Risk More than Minimal Risk
- Qualified Scientist (QS) Required (Form 2): Yes No
- Risk Assessment Required (Form 3): Yes No
- Written Minor Assent required for minor participants:
 Yes No Not applicable (No minors in this study)
- Written Parental Permission required for minor participants:
 Yes No Not applicable (No minors in this study)
- Written Informed Consent required for participants 18 years or older:
 Yes No Not applicable (No participants 18 yrs or older in this study)

IRB SIGNATURES (All 3 signatures required) None of these individuals may be the adult sponsor, direct 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, doctor of pharmacy, or registered nurse) with expertise related to this project.

Printed Name _____ Degree/Professional License _____
Signature/Date (prior to experimentation) _____ Email _____

Educator

Printed Name _____ Degree/Professional License _____
Signature/Date (prior to experimentation) _____ Email _____

School Administrator

Printed Name _____ Degree/Professional License _____
Signature/Date (prior to experimentation) _____ Email _____

Form 4

Informed Consent

- Human subjects **MUST** give Informed Consent to participate in research...
- Minors cannot give Informed Consent...their parents must sign in their stead...
- A copy of any Survey tools used by the student must accompany the protocol forms
- Copyrighted Survey tools need to be accompanied with *written permission from the publisher*

Middle School - Human Subjects Informed Consent Form

Instructions to the Student Researcher/Team Leader:

- An informed consent/assent/permission form should be developed in consultation with the Adult Sponsor.
- This form is used to provide information to the research participant (or parent/guardian) about the study.
- This form documents written informed consent, minor assent, and/or parental permission when required.
- All signed informed consent forms are to be kept by the Student Researcher/Team Leader or Adult Sponsor in a safe, non-public place and NEVER sent to the regional, state or international competition SRCs.
- Student Researchers may use this sample form or copy ALL elements of it into a new document. Documents not incorporating ALL of the elements below will make the Informed Consent Form invalid.
- A separate photo release form should be developed and used if photographs of people other than the Student Researcher(s) are to be used in the display.

Student's Name(s): _____

Project Title: _____

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 box below.

The purpose of the project is to: _____

If you participate, you will be asked to: _____

The time required for participation is: _____

The potential risks of participating in the study include, but may not be limited to: _____

The benefits to you personally include, but may not be limited to: _____

Confidentiality will be maintained by: _____

If you have any questions about this study, feel free to contact:
Adult Sponsor: _____ Email: _____

Participation Disclaimer: 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 do 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 understood the information above and I freely give my consent/assent to participate or permission for my child to participate.

Adult Informed Consent/Minor Assent:

_____	_____	_____
Participant's Printed Name	Signature	Date Reviewed (mm/dd/yy)

Parental/Guardian Permission (if applicable):

_____	_____	_____
Parent/Guardian's Printed Name	Signature	Date Reviewed (mm/dd/yy)

2023/2024 Page 25

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, Direct 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 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: _____
(mm/dd/yy)

Research Participant Printed Name: _____ Signature: _____

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

Parent/Guardian Printed Name: _____ Signature: _____

International Rules: Guidelines for Science and Engineering Fairs 2024-2025, societyforscience.org/ISEF Page 39

Form 5A

Vertebrate Animal Form

- In most cases, Vertebrate Animal projects must have the approval and signatures of a DVM
- Studies that don't interfere or manipulate the behavior, diet, or environment of an animal (i.e., Observational) may not need Form 5A

Middle School - Vertebrate Animal Form (5A)
This form is only required for projects involving vertebrate animals being conducted in a school, home or field research setting and MUST be completed and approved by the SRC PRIOR to experimentation.

To be completed by the Student Researcher/Team Leader in collaboration with the Adult Sponsor, Designated Supervisor and/or Qualified Scientist/Mentor. All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____
Project Title: _____

1. Common name (or Genus, species) and number of each animal used.
2. Describe in detail the housing and husbandry to be provided for each type of animal. 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.
3. What will happen to the animals after experimentation?
4. If applicable, attach a copy of wildlife licenses or approval forms.

The CSEF Vertebrate Animal Rules require that ANY death, illness or unexpected weight loss be investigated, explained, and documented by a letter from the qualified scientist, designated supervisor or veterinarian. Attach this letter to this form when submitting paperwork to the SRC prior to competition. ***If the death, illness or unexpected weight loss is found to be due to the experiment, then it must be terminated IMMEDIATELY.***

To be completed by the local or school Scientific Review Committee PRIOR to experimentation.
The SRC has carefully reviewed this study and finds it is an appropriate study and may be conducted in a non-regulated research site. The Student Researcher MUST have at least the following level of supervision (mark highest level required):

Designated Supervisor REQUIRED. Please have applicable person sign in the appropriate box below.
 Veterinarian and Designated Supervisor REQUIRED. Please have the applicable people sign in the appropriate boxes below.
 Veterinarian, Designated Supervisor and Qualified Scientist/Mentor REQUIRED. Please have the applicable people sign in the appropriate boxes below and complete a Qualified Scientist/Mentor Form 2.

SRC Chair's Printed Name SRC Chair's Signature Date of Approval (mm/dd/yy)

<p>Veterinarian:</p> <p><input type="checkbox"/> I have reviewed this research plan and animal husbandry with the student(s) PRIOR to the start of experimentation.</p> <p><input type="checkbox"/> I have approved the use and dosages of prescription drugs and/or nutritional supplements (if applicable).</p> <p><input type="checkbox"/> I will provide veterinary medical and nursing care in case of illness or emergency.</p> <p>_____ Veterinarian's Printed Name Email or Phone</p> <p>_____ Veterinarian's Signature Date of Approval</p>	<p>Designated Supervisor:</p> <p><input type="checkbox"/> I have reviewed this research and animal husbandry with the student(s) PRIOR to experimentation and I accept primary responsibility for the care and handling of the animals in this project.</p> <p><input type="checkbox"/> I will provide DIRECT supervision during experimentation.</p> <p>_____ Designated Supervisor's Printed Name Email or Phone</p> <p>_____ Designated Supervisor's Signature Date of Approval</p>
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2023/2024 Page 30

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 ISEF Vertebrate Animal Rules require that any death, illness or unexpected weight loss be investigated and documented by a letter from the qualified scientist, direct 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 (select one):

Direct Supervisor REQUIRED. Please have applicable person sign below.
 Veterinarian and Direct Supervisor REQUIRED. Please have applicable persons sign below.
 Veterinarian, Direct 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)

<p>To be completed by Veterinarian:</p> <p><input type="checkbox"/> I have reviewed this research and animal husbandry with the student before the start of experimentation.</p> <p><input type="checkbox"/> I have approved the use and dosages of prescription drugs and/or nutritional supplements.</p> <p><input type="checkbox"/> I will provide veterinary medical and nursing care in case of illness or emergency. (Fees may apply.)</p> <p>_____ Printed Name Email/Phone</p> <p>_____ Signature Date of Approval (mm/dd/yy)</p>	<p>To be completed by Direct Supervisor or Qualified Scientist when applicable:</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> I will directly supervise the experiment.</p> <p>_____ Printed Name Email/Phone</p> <p>_____ Signature Date of Approval (mm/dd/yy)</p>
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Page 40 International Rules: Guidelines for Science and Engineering Fairs 2024-2025, societyforscience.org/ISEF

Form 5B

Vertebrate Animal Form (at a Regulated Institution)

Middle School - Vertebrate Animal Form (5B)

This form is only required for projects involving vertebrate animals being conducted at a Regulated Research Institution and may be completed after experimentation. IACUC approval is required PRIOR to experimentation.

To be completed by the Qualified Scientist or Principal Investigator. The Student Researcher/Team Leader is NOT to complete any part of this form! All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____

Project Title: _____

1. Title and Protocol Number of IACUC Approved Project: _____

2. Species and number of each animal used.

3. 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.

4. Was there any weight loss or death of any animal? If yes, attach a letter obtained from the Student Researcher's qualified scientist, designated supervisor or veterinarian documenting the situation and the results of the investigation.

5. The Student Researcher's project *did* / *did not* involve the use of tissues? If yes, Forms 6A and 6B must be completed.

6. What laboratory training (include specific dates) was provided to the student?

A copy of the Regulated Research Institution IACUC Approval MUST be attached to this form. *A letter from the Qualified Scientist or Principal Investigator will NOT satisfy this requirement.*

Qualified Scientist/Mentor or Principal Investigator:

Printed Name

Signature

Date (mm/dd/yy)

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, direct 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 (mm/dd/yy)

Form 6A

Hazardous Biological Agents

- **BSL1** – Microorganisms can be cultured in a Middle School/High School level facility, and must be permanently sealed at the time of inoculation
- **BSL2** – These are hospital level facilities, where cultured plates can be resampled with proper safety equipment and supervision...

Middle School - Potentially Hazardous Biological Agents Form (6A)
This form is required for ALL projects involving microorganisms, rDNA, fresh/frozen tissue, blood, blood products and body fluids. SRC/IACUC/IBC approval is required PRIOR to experimentation.

This form is to be completed by the Qualified Scientist/Mentor in collaboration with the Student Researcher/Team Leader. All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____
Project Title: _____

1. Identify ALL of the potentially hazardous biological agents to be used in this experiment. Include where you obtained them, how much you are using and the biosafety level of each one.

2. Where will you be conducting the experimentation? Include the level of biosafety containment available at each site.

3. How will you minimize any risk associated in working with these agents? (What personal protective equipment will you be wearing, what type of hood is being used, will you be sealing the Petri dishes and not opening them, etc.?)

4. The final biosafety level I recommend for this project is: BSL-1 or BSL-2
5. How are you going to dispose of all cultured materials and other potentially hazardous biological agents?

6. What training will the Student Researcher(s) receive?

7. What experience/training does the Designated Supervisor (for BSL-1 studies only) have as it relates to the student's area of research?

Qualified Scientist/Mentor: (check only 1 certification statement below)

I certify that the experimentation **was not** conducted at a Regulated Research Institution, but was conducted at a (check one) BSL-1 or BSL-2 laboratory. The study has been reviewed by the local or school SRC and the procedures have been approved PRIOR to experimentation. **OR**

I certify that the experimentation **was** conducted at a Regulated Research Institution and was approved by the appropriate institutional board PRIOR to experimentation. Institutional approval forms are attached. Date of IACUC/IBC Approval: _____ **OR**

I certify that the experimentation **was** conducted at a Regulated Research Institution that does not require pre-approval for this type of study. The local or school SRC has reviewed that the student received appropriate training and the project complies with the CSEF Middle School rules.

Qualified Scientist's Printed Name _____
Qualified Scientist's Signature _____
Date of Acknowledgement (mm/dd/yy)

To be completed by the local or school Scientific Review Committee.
The SRC has seen this project's research plan and supporting documentation and acknowledges the accuracy of the information provided above.

SRC Chair's Printed Name _____
SRC Chair's Signature _____
Date of Approval (mm/dd/yy)

2023/2024 Page 36

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/DIRECT 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 strain, 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. If BSL-2 laboratory, include the BSL-2 checklist.

SECTION 2: TRAINING

1. What training will the student receive for this project?

2. Experience/training of Direct Supervisor as it relates to the student's area of research (if applicable).

SECTION 3: For ALL CELL LINES, MICROORGANISMS AND TISSUES - To be completed by the QUALIFIED SCIENTIST or Direct Supervisor - Check the appropriate box(es) below:

Experimentation on the microorganisms/cell lines/tissues to be used in this study will NOT be conducted at a Regulated Research Institution, but will be conducted at a (check one) BSL-1 or BSL-2 laboratory (include a copy of the checklist for BSL-2). [This study has been reviewed by the local SRC and the procedures have been approved prior to experimentation.]

Experimentation on the microorganisms/cell lines/tissues to be used in this study will be 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 _____

Experimentation on the microorganisms/cell lines/tissues to be used in this study will be conducted at a Regulated Research Institution, which does not require IBC or IAUC pre-approval for this type of study. The SRC has seen and approved the research plan and supporting documentation and acknowledges the accuracy of the responses above.

CERTIFICATION - To be SIGNED by the QUALIFIED SCIENTIST or Direct 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 _____
Date of review (mm/dd/yy)

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.

SRC Printed Name _____
Signature _____
Date of review (mm/dd/yy)

Page 42 International Rules: Guidelines for Science and Engineering Fairs 2024-2025, societyforscience.org/ISEF

Form 6B

Human and Vertebrate Animal Tissue

Middle School - Human and Vertebrate Animal Tissue Form (6B)

This form is required for ALL projects involving fresh/frozen tissue, blood, blood products and body fluids. Form 6A MUST also be completed. If the research also involves living organisms (human or vertebrate animals), please ensure that the proper forms are completed.

This form is to be completed by the Student Researcher/Team Leader in collaboration with the Qualified Scientist/Mentor. All questions MUST be answered and additional pages may be attached.

Student's Name(s): _____

Project Title: _____

1. What type of tissue will be used in this study? Check ALL that apply.

- Fresh or Frozen Tissue Sample
- Fresh Organ or Other Body Part(s)
- Blood
- Body Fluids
- Primary Cell/Tissue Cultures
- Human or Other Primate Established Cell Lines

2. From where will you obtain the above tissue(s)? Established cell lines must be identified by the source and catalog number.

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 the date of IACUC approval included.

Qualified Scientist/Mentor:

I verify that the student will work solely with organs, tissues, cultures or cells that will be supplied to him/her/them 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 Researcher's project.

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 Review (mm/dd/yy)
		(MUST be PRIOR to experimentation)
_____	_____	
Title	Email	
_____	_____	
Institution		

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 a copy of IACUC approval. If human tissues were used, attach a copy of IRB approval.

To be completed by the Qualified Scientist or Direct Supervisor:

I verify that the student will work solely with de-identified 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 U.S. Occupational Safety and Health Act, 29CFR, Subpart Z, 1910.1030 - Blood Borne Pathogens.

_____	_____	_____
Printed Name	Signature	Date of Approval (mm/dd/yy)
		(Must be prior to experimentation.)
_____	_____	_____
Title	Phone/Email	
_____	_____	
Institution		

Form 7

Continuation Form

Make sure to ID the year, title, and student name on ALL attachments!

Current year's Display can ONLY contain data from current year's work (previous year's work can be inside binders on the display table)

Middle School - Continuation/Progression of Projects Form (7)
This form is required for ALL projects that are a continuation/progression in the same field of study as a previous project done by the Student Researcher(s) and MUST be completed AFTER experimentation.

This form is to be completed by the Student Researcher/Team Leader and accompanied by previous year(s)' abstract and Research Plan. List all components of the current project that make it new and different from previous research. ALL questions MUST be answered and be on this form. Use additional Form 7's for multiple years.

Student's Name(s): _____

	Current Research Project (2023-2024)	Previous Research Project Year: _____
1. Title		
2. Change in Goal/Purpose/Objective		
3. Changes in Methodology		
4. Variables Studied		
5. Additional Changes		

Student Researcher or Team Leader:

I have attached the relevant previous year's abstract and Research Plan to this form.
AND
 I hereby certify that the above information is correct and that the current year's abstract and project display board properly reflect work done ONLY in this current year (2023/2024).

Student Researcher/Team Leader's Printed Name

Student Researcher/Team Leader's Signature

Date of Signature (mm/dd/yy)

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.

Components	Current Research Project	Previous Research Project: Year: _____
1. Title		
2. Change in goal/purpose/objective		
3. Changes in methodology		
4. Variable studied		
5. Additional changes		

Attached are:
 Abstract and Research Plan/Project Summary, 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(s)

Signature

Date of Signature (mm/dd/yy)

Display & Safety!

The ISEF website does a good job listing what's allowed, and what's not..

<https://www.societyforscience.org/isef/international-rules/display-safety-rules/>



The Do's and Don'ts of D&S...

Total Display Size = 30 in. x 48 in. x 108 in.

The Display Should Have...

- An Introduction, Research Questions, Engineering Goals, Hypotheses, Predictions, Data, Discussion, a Conclusion, and Data books/Journals
- Photo Credits (any photos on display of people besides the student need written permission from that individual)
- Web Image Credits (including any background images)
- Graphs, Maps, Data Table Credits (generally a statement that the student made them is fine)

The Display Should NOT Have...

- WATER!, chemicals, tissues, sand/soil, raw plant material, dangerous devices, most lasers, 3D printers, glass, sharps, pressurized tanks, etc.
- Logos, promotional material, business cards, or advertisements
- Photos of necrotic tissue, animals in surgical situations, or animals in distress
- QR codes or personally identifiable student information
- Patents, or patents pending...

THANK YOU SO MUCH FOR ATTENDING!
The work you do MAKES A DIFFERENCE! 😊

Questions?...Contact Us!

Loree' Harvey

SLVRSFDirector@gmail.com

719-580-3316

