

Beal Bank Dallas Regional Science and Engineering Fair

DRSEF



2023 - 2024 Handbook

The Dallas Regional Science and Engineering Fair (DRSEF) is a non-profit organization that holds an annual science fair for 6th - 12th grade students at public, charter, private and home schools in Texas Education Agency Region 10. DRSEF is affiliated with the Intel International Science and Engineering Fair. Students begin by entering the fair at their local school, then the top projects at each school advance to district fairs and then the regional fair. Winning projects from DRSEF can then advance to state and international competitions.

The Junior Division of DRSEF is a competitive event for 6th-8th graders. The Senior Division is a competitive event for 9th-12th graders. All participating students are required to register their projects through the STEM Wizard registration system and follow all the Regeneron International Science and Engineering Fair (ISEF) Rules with the exception that instead of the ISEF forms, Junior Division will submit the Safety and Consent Form for Texas Middle School Science Fair Students. All forms can be found in STEM Wizard.

Beal Bank awards cash prizes for 1st – 3rd place in each category judged, with 4th place awarded for larger categories. Junior Division prizes of up to \$175 are awarded along with Senior Division prizes up to \$300. Honorable Mentions are also awarded during Category judging. 1st and 2nd place winners in Senior Division and 1st place and 2nd place winners in Junior Division from Category Judging advance to the Texas Science and Engineering Fair. The top ten percent of Junior Division are invited to enter Thermo Fisher Scientific Junior Innovators Challenge, an international science fair for Middle School students. Invitations are issued after the fair. Winners and runners-up from the Grand Prize round in the Senior Division advance to the Regeneron International Science and Engineering Fair, with attendance sponsored by Beal Bank. Students may also be eligible to enter competitions such as Regeneron Science Talent Search, a science competition for high school seniors affiliated with ISEF.

Important Dates:

February 2, 2024: all student projects must be complete & submitted in STEM Wizard

February 17, 2024: Dallas Regional Science and Engineering Fair

March 22-23, 2024: Texas Science and Engineering Fair

May 11-17, 2024: Regeneron International Science and Engineering Fair

What's Notable for 2024

We have a new registration system, STEM Wizard. We will have training on STEM Wizard in September.

For the Junior Division, we have consolidated the ISEF paperwork into one form. Middle school students still need to follow ISEF rules, but they will only have one form that replaces the ISEF forms. Additional documentation may be necessary depending on the project.

No objects other than boards, binders, laptops/tablets and ISEF paperwork requirements are allowed in the exhibit hall. This means demonstration items are not allowed.

Once again, we will be in person at Centennial Hall at Fair Park. Students will need a physical display board. However, a virtual display board will still be required for judges to preview the projects. Students should use the project board template for their virtual display boards.

On or before February 2, 2024, Schools must make sure all students advancing to the regional fair have met all milestones due in STEM Wizard. Then follow the directions to complete your school registration. More information on STEM Wizard training will be provided.

The number of projects allowed by each school is 2% of the total student population.

Entry fees of \$15 per student (not per project) are due by February 17, 2024. Payment is accepted by check or online. A formal invoice may be requested from DRSEF@smu.edu.

Make checks payable to DRSEF, include your school's name, and mail to:

Dallas Regional Science and Engineering Fair

Southern Methodist University

PO Box 750220

Dallas, TX 75275-0220

STEM Wizard

All Junior and Senior Division school and student registration will be done through STEM Wizard. Paper forms will not be accepted. Student STEM Wizard accounts should be created, and the research plan approved by the teacher, SRC (if required), and IRB (if required) prior to the student beginning their research. STEM Wizard has a rules wizard embedded in it that will determine what forms students need to fill out for their project. It is up to the student and teacher to make sure that all paperwork is filled out properly including dates (start date must be after approval signatures). Students must have parental approval in STEM Wizard. If a student fails to meet a deadline, their account may be deactivated, and they will not be able to compete.

STEM Wizard Training Materials: [Click here for student and teacher guide.](#)

Registration Steps

If your school is not registered in STEM Wizard, please have your school fair administrator email us: drsef@smu.edu

Once your school is registered in STEM Wizard, all teachers with participating students need to register.

Once all teachers are registered, begin student registration.

All registration milestones with due dates prior to the deadline of February 2, 2024, must be completed by the deadline:

- All students advancing to the regional fair must have uploaded all the paperwork and project materials in STEM Wizard by the deadline.
- After teachers confirm which students are advancing, students then confirm their categories and registration in STEM Wizard.
- All registration steps **MUST BE COMPLETED** by the deadline, or the student will be deactivated in STEM Wizard and unable to compete.

No late entries will be allowed.

Rules for Participating in DRSEF

Ethics Statement

Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of other researcher's work as one's own and fabrication of data. Fraudulent projects will fail to qualify for competition in affiliated fairs and ISEF. DRSEF reserves the right to revoke recognition of a project subsequently found to have been fraudulent.

Eligibility

1. Any student in grades 6-12 or equivalent, enrolled in a public, private, parochial, or home school in the region covered by DRSEF is eligible to participate in DRSEF. 6th-8th graders compete in the Junior Division, and 9th-12th graders compete in the Senior Division.
2. If there is a science fair program in a school, district, or other entity that the student falls under, then only students in that program that are advanced by the program may participate in DRSEF.
3. Students may not have reached 19 years of age, on or before May 1st of the event year.
4. Students are not permitted to simultaneously enter another regional ISEF-affiliated science fair.
5. Team projects may have a maximum of three team members. Each team is encouraged to appoint a team leader to coordinate the work and act as spokesperson. However, each member of the team should be able to serve as spokesperson, be fully involved with the project, and must be familiar with all aspects of the project. The final work should reflect the coordinated efforts of all team members and will be evaluated using similar rules and judging criteria as individual projects. Teams must be set up prior to the start of the project (including documentation). Team members may not be added or removed once the project begins. A mixed team with members from different schools or geographic regions may compete at DRSEF (one team member must be from the DRSEF region), but not at multiple fairs. The team can only compete under one of the schools and will need permission from both schools to compete.
6. Projects that are demonstrations, library research or informational projects, explanation models or kit building are not appropriate for DRSEF.
7. A research project may be a part of a larger study performed by professional scientists, but the project presented by the student must be only their own portion of the complete study (See Ethics Statement above).

General Requirements

1. All students competing in DRSEF must adhere to all of the rules as set forth in this document and by ISEF. In the case of a conflict between the ISEF and DRSEF rules, DRSEF rules supersede ISEF rules.
2. All projects must adhere to the Ethics Statement above.
3. It is the responsibility of the student researcher(s) and the Adult Sponsor/Teacher to evaluate the project to determine if the research will require additional forms and/or review and approval prior to experimentation, especially projects that include human participants, vertebrate animals, or potentially hazardous biological agents.
4. Projects must adhere to local, state and U.S. Federal laws, regulations and permitting conditions. In addition, projects conducted outside the U.S. must also adhere to the laws of the country and jurisdiction in which the project was performed.
5. The use of non-animal research methods and the use of alternatives to animal research are strongly encouraged and must be explored before conducting a vertebrate animal project.
6. Introduction or disposal of non-native and/or invasive species (e.g. insects, plants, invertebrates, vertebrates), pathogens, toxic chemicals or foreign substances into the environment is prohibited. It is recommended that students reference their local, state or national regulations and quarantine lists.

Project Categories

Many projects could easily fit into multiple categories. We highly recommend that you review the entire listing of the categories before carefully choosing the category that most accurately describes your project.

Animal Sciences (ANIM)

- Agricultural Animal Science
- Animal Behavior
- Cellular Studies
- Development
- Ecology
- Genetics
- Nutrition and Growth
- Physiology
- Systematics & Evolution

Behavioral and Social Sciences (BEHA)

- Clinical and Development Psychology
- Cognitive Psychology
- Neuroscience
- Physiological Psychology
- Social Psychology

Biochemistry (BCHM)

- Analytical Biochemistry
- General Biochemistry
- Medicinal Biochemistry
- Structural Biochemistry

Biomedical and Health Sciences/ Biomedical

Engineering (BMED)

- Biomedical Engineering
- Cell, Organ, and Systems Physiology
- Genomics and Genetics
- Nutrition
- Computational Biomodeling
- Computational Biology
- Computer Neuroscience

Cellular and Molecular Biology (CELL)

- Cell Physiology
- Cellular Immunology
- Genetics
- Molecular Biology
- Neurobiology

Chemistry (CHEM)

- Analytical Chemistry
- Computational Chemistry
- Environmental Chemistry
- Organic/Inorganic chemistry
- Materials Chemistry
- Physical Chemistry

Earth and Environmental Sciences (EAEV)

- Atmospheric Science
- Climate Science
- Environmental Effects on Ecosystems
- Geosciences
- Water Science

Embedded Systems (EBED)

- System Hardware
- Circuits
- Internet of Things
- Microcontrollers
- Networking/Communications
- Optics
- Sensors
- Signal Processing
- Robotic Mechanical Design

Energy: Sustainable Materials and Design (EGSD)

- Biological Process and Design
- Solar Process, Materials, and Design
- Energy Storage
- Wind and Water Movement Power Generation
- Hydrogen Generation and Storage
- Thermal Generation and Design
- Triboelectricity and Electrolysis

Engineering Technology: Statics and Dynamics (ETSD)

- Aerospace and Aeronautical Engineering
- Civil Engineering
- Computational Mechanics
- Control Theory
- Electrical Engineering
- Ground Vehicle Systems
- Industrial Engineering-Processing
- Mechanical Engineering
- Naval Systems
- Structural Engineering

Environmental Engineering (ENEV)

- Bioremediation
- Land Reclamation
- Pollution Control
- Recycling and Waste Management
- Water Resources Management

Materials Science (MATS)

- Biomaterials
- Ceramic and Glasses
- Composite Materials
- Computation and Theory
- Electronic, Optical, and Magnetic Materials
- Nanomaterials
- Polymers

Mathematics (MATH)

- Algebra
- Combinatorics, Graph Theory, and Game Theory
- Geometry and Topology
- Mathematical Analysis
- Number Theory
- Probability and Statistics

Microbiology (MCRO)

- Antimicrobials and Antibiotics
- Applied Microbiology
- Bacteriology
- Environmental Microbiology
- Microbial Genetics
- Virology

Physics and Astronomy (PHYS)

- Atomic, Molecular, and Optical Physics
- Astronomy and Cosmology
- Biological Physics
- Condensed Matter and Materials
- Mechanics
- Nuclear and Particle Physics
- Theoretical, Computational, and Quantum Physics

Plant Sciences (PLNT)

- Agriculture and Agronomy
- Ecology
- Genetics and Breeding
- Growth and Development
- Pathology
- Plant Physiology
- Systematics and Evolution

Systems Software (SOFT)

- Algorithms
- Cybersecurity
- Databases
- Human/Machine Interface
- Languages and Operating Systems
- Mobile Apps
- Robotics Artificial Intelligence/Cognitive Systems
- Machine Learning

Translational Medical Sciences (aka Disease Studies) (TMED)

- Disease Detection and Diagnosis
- Disease Prevention
- Disease Treatment and Therapies
- Drug Identification and Testing
- Pre-Clinical Studies

Project Display

Maximum Size of Project

- Depth (front to back):
- 30 inches or 76 cm
- Width (side to side):
- 48 inches or 122 cm
- Height (floor to top):
- 108 inches or 274 cm

Please be aware when ordering posters that the mechanism that supports the poster should conform to the maximum size limitations stated above.

All project materials and support mechanisms must fit within the project dimensions.

At DRSEF, fair-provided tables will not exceed a height of 36 inches (91 centimeters). Remember to take the table height into account when determining the height of the project.

Display & Safety

No objects other than boards, binders, laptops/tablets and ISEF paperwork requirements are allowed in the exhibit hall (new for 2024).

Board displays must follow all ISEF rules and may not contain any of the items listed below.

The following items are prohibited in the exhibit hall:

- Organisms; living, dead or preserved (plants or animals)
- Human/animal parts or body fluids (for example: blood, urine)
- Human or animal food in any form, including residues
- Bacteria or mold cultures
- Chemicals and liquids - including water
- Poisons, drugs, controlled or hazardous substances
- Sharp items (for example: syringes, needles, pipettes, knives)
- Glass or glass objects
- Pressurized tanks or containers
- Batteries with open top cells (so that battery acid can be seen)
- Dirt/soil, rock/gravel, sand, waste product, etc.
- Photographs or drawings of animals or people in surgical techniques, dissections, or necropsies
- Items deemed potentially hazardous by D&S

Display Content for Projects Conducted at a Research Institution

The display must reflect only the work conducted by the finalist. Minimal reference to mentor's or other researcher's work must only reflect background information or be used to clarify differences between finalist's and others' work. Do not include logos or the name of the research institution on the board.

Photograph/Image Display Requirements

Display of photographs of people other than that of the student researcher must have a photo release signed by the subject, and if under 18 years of age, also by the guardian of the subject.

Sample consent text: "I consent to the use of visual images (photos, videos, etc.) involving my participation/my child's participation in this research." (These forms must be available upon request, but shall not be displayed.

Roles & Responsibilities of Students & Adults

The Student Researcher(s)

The student researcher is responsible for all aspects of the research project including enlisting the aid of any required supervisory adults (Adult Sponsor, Qualified Scientist, etc.), obtaining necessary approvals (SRC, IRB, etc.), following the Rules & Guidelines of DRSEF, and performing the experimentation, engineering, data analysis, etc. Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of other researcher's work as one's own, and fabrication of data. Fraudulent projects will fail to qualify for competition. DRSEF reserves the right to revoke recognition of a project subsequently found to have been fraudulent.

The Adult Sponsor

An Adult Sponsor may be a teacher (preferred), parent, professor, and/or other professional scientist in whose lab the student is working. This individual must have a solid background in science and should have close contact with the student during the course of the project. The Adult Sponsor is responsible for ensuring the student's research is eligible for entry in DRSEF.

Qualified Scientist

A Qualified Scientist should have earned a doctoral/ professional degree in a scientific discipline that relates to the student's area of research. Alternatively, the SRC may consider an individual with extensive experience and expertise in the student's area of research as a Qualified Scientist. The Qualified Scientist must be thoroughly familiar with local, state, and federal regulations that govern the student's area of research.

Designated Supervisor

The Designated Supervisor is an adult who is directly responsible for overseeing student experimentation. The Designated Supervisor need not have an advanced degree, but must be thoroughly familiar with the student's project, and must be trained in the student's area of research. The Adult Sponsor may act as the Designated Supervisor.

Scientific Review Committee (SRC)

The DRSEF Scientific Review Committee (SRC) is a group of qualified individuals that is responsible for evaluation of student research, certifications, research plans and exhibits for compliance with the rules, applicable laws and regulations at each level of science fair competition. Most proposed research projects involving vertebrate animals and/or potentially hazardous biological agents must be reviewed and approved BEFORE experimentation. Local or regional SRC prior review is not required for human studies previously reviewed and approved by a properly constituted IRB. ALL projects, including those

previously reviewed and approved by an IRB must be reviewed and approved by the SRC after experimentation and before competition in an Affiliated Fair. Projects which were conducted at a Regulated Research Institution (not home, high school or field) and which were reviewed and approved by the proper institutional board before experimentation, must also be approved by the Affiliated Fair SRC. An SRC must consist of a minimum of three persons, including the following: a biomedical scientist with an earned graduate degree, an educator, and at least one additional member. To avoid conflict of interest, no Adult Sponsor, parent or other relative of the student, the Qualified Scientist, or Designated Supervisor who oversees the project may serve on the SRC reviewing that project.

Institutional Review Board (IRB)

An Institutional Review Board (IRB), is a committee that must evaluate the potential physical and/or psychological risk of research involving humans. All proposed human research must be reviewed and approved by an IRB before experimentation begins. This includes review of any surveys or questionnaires to be used in a project. Federal regulations require local community involvement. Therefore, it is advisable that an IRB be established at the school level to evaluate human research projects. An IRB must consist of a minimum of three members including the following: an educator, a school administrator (preferably principal or vice principal), and a medical or mental health professional. To avoid conflict of interest, no Adult Sponsor, parent or other relative of the student, the Qualified Scientist, or Designated Supervisor who oversees the project may serve on the IRB reviewing that project.

Message from the DRSEF Scientific Review Committee

Prior to attempting to complete any documentation for entry to DRSEF, we strongly recommend that students communicate with mentors and/or adult sponsors to firmly grasp the extent of the research and the necessary documentation that DRSEF requires for the student's project.

To help guide you with the appropriate forms, before you start your research, we strongly suggest you use the Rules Wizard in your DRSEF STEM Wizard account or at <https://ruleswizard.societyforscience.org/>

Top DRSEF Paperwork Problems to Avoid:

1. Research plan lacks sufficient details and fails to provide thorough information to support the documentation provided. A properly written research plan must include:

- a. a detailed list of materials including amounts. Include where you will purchase any bacteria or other potentially hazardous biological agents. If you will use E. coli k-12, make sure to list that as the material.

- b. a detailed research plan - projects which cannot be assessed because the research plan is not sufficient will fail to qualify.
- c. clear details about what the student will do when working in a research institution or as part of a larger project. The research plan must identify the student and mentor role in the project.
- d. any additional documentation needed to understand the project including any surveys or tests for human subjects, last year's paperwork for continuation studies, etc.

2. Missing or incorrect paperwork (ISEF Forms and Rules Quick Reference (Senior Division))

- a. The project must include all required forms with the appropriate signatures needed for the specific project.
- b. Parents, relatives, the adult sponsor (teacher), qualified scientist, or designated supervisor of the student may not sign as SRC or IRB members to avoid a conflict of interest.
- c. Approval of projects must take place prior to experimentation as noted by approval signatures predating the start date.

3. Human Participants

- a. The student researcher is a human participant in their project if they are the subject of the experiment or a variable in the experiment.
 - i. This requires Form 4 for the Senior Division.
 - ii. For the Junior Division, signatures from the Science Teacher, School Administrator, AND a Psychologist, Medical Doctor, or Registered Nurse are required on the Safety and Consent Form. The only exception is if the researcher OR the adult sponsor is testing student designed software.
- b. If the student works at a regulated research institution, approval for the project needs to be from the institutional IRB, not from the school IRB. This is for ALL divisions.

4. Vertebrate Animals

- a. Students are not allowed to cause pain, distress, or death to animals in their study.
- b. If students work at a regulated research institution, they will need to submit the IACUC approval for the project with a letter from the IACUC stating the student was trained and allowed to work on the study.
- c. Tissue analysis projects are identified as vertebrate animal projects. If the student never comes in contact with live animals and only uses vertebrate animal tissues collected by someone

else for the study, this is a tissue study (forms 6A and 6B for the Senior Division, requires signatures from the Science Teacher AND a Biomedical/Biological Scientist for Junior Division)

5. Potentially hazardous biological agents

- a. Bacteria, mold, or other microorganisms can NOT be done at home. This is an automatic disqualification.
- b. Microorganisms must be grown in the appropriate BSL setting under supervision following standard laboratory protocols.
- c. Students are only allowed to work with BSL-1 or BSL-2 organisms.
- d. Unknown organisms cultured from the environment can be treated as BSL-1 only if the petri dishes are sealed shut and never reopened prior to proper disposal.

6. Regulated Research Institution or Industrial Setting

- a. Form 1C (Senior Division) must be filled out and signed by the person who approved the student to work in their lab or business such as the person at HEB that gives the person the right to collect samples there or the research lab supervisor at the university where the person worked. It should NOT be filled out by the parent or teacher.
- b. For the Junior Division, any student working at a business or research institution will need a document from the person who gave them permission to work at the location (NOT the parent or teacher). Form 1C may be used for this as well.

7. Missing Risk Assessment Form 3 (Senior Division only)

- a. Must be completed for projects that involve chemicals, equipment, or other potential hazards.
- b. Must be completed for any project involving human testing of student-designed inventions, prototypes, or consumer products.
- c. Often missing, and often incomplete without description of safety precautions taken.

Sample Junior Division Form, page 1 of 2

Safety and Consent Form Texas Middle School Science Fair Students

Student and Project Information

Team Project:	# of Participants:	
First Name	Last Name	Grade
1 _____	_____	_____
2 _____	_____	_____
3 _____	_____	_____
		District _____
		School _____
		Teacher Name _____
		Teacher Email _____

Project Title: _____

BEFORE Experimentation Begins – Project Safety Concerns and Pre-Approval Signatures

Certain projects require additional considerations and supervision. Read through each of the following restrictions carefully. Determine if any of these apply to your project. Some projects may be subject to multiple restrictions. If any of these restrictions apply to your project, check the box for that area. **If no restrictions apply** only the science teacher signature is required. **Before beginning experimentation**, you will need to obtain any additional signatures listed in the restrictions.

☐ **Human Test Subjects** (Example: surveys, taste tests, play a game or interact with another human in any way)

If you are working with humans of ANY age, you need PRE-approval from a **Science Teacher, School Administrator, AND a Psychologist, Medical Doctor or Registered Nurse** to make sure your research is safe. This includes the student researcher participating in the experiment or using their product. During the review, if it is determined that there is more than minimal risk to the human subjects involved in the project, the student must obtain written consent from each of the participants and **written parental consent for students under 18 years old if required**.

Required Signatures: Science Teacher, School Administrator, AND a Psychologist, Medical Doctor, or Registered Nurse. The surveys or test you intend to use must be attached.

☐ **Non-Human Vertebrate Animals** (Example: fish, rats, rabbits, dogs, cats etc.)

Experiments involving laboratory animals or pets (fish, rats, mice, hamsters, gerbils, rabbits, etc.) must be conducted in a student's home except for behavior studies on pets. Proper animal care must be provided daily, including weekends, holidays. Experimental procedures that cause unnecessary pain or discomfort are prohibited. Experiments designed to kill vertebrate animals are not permitted. Animals due to experimentation will disqualify the project. Behavioral studies or supplemental nutritional studies involving pets or livestock are allowed in the home.

Required Signatures: Science Teacher AND a Veterinarian or other Biomedical/Biological Scientist.

☐ **Potentially Hazardous Biological Agents** (Bacteria, Mold, Fungi, Viruses, Parasites, Recombinant DNA (rDNA), Human or Animal fresh tissues, blood or body fluids, etc.)

All **Biosafety Level 1** projects can be performed in a school laboratory. **BACTERIA MAY NOT BE GROWN AT HOME**. Standard microbiological practices must be used and all hazardous agents must be properly disposed of at the end of experimentation. The experiment must be supervised by a qualified scientist or a trained designated supervisor.

Required Signatures: Science Teacher AND a Biomedical/Biological Scientist

☐ **Controlled Substances** (Example: Over the counter or prescription drugs, tobacco, and alcohol)

Students must adhere to all federal, state and local laws when acquiring and handling controlled substances. Only under the direction of a qualified scientist or designated supervisor may a student use federally controlled or experimental substances for experimentation.

Required Signatures: Science Teacher AND a Designated Supervisor or Qualified Scientist (the adult monitoring the student)

☐ **Hazardous Chemicals, Substances, Activities, or Devices** (Chemicals, firearms, power tools, welders, lasers, radioactive substances, radiation)

Students must adhere to federal and state regulations governing hazardous substances or devices. **An adult must directly supervise experiments**. Students working with hazardous substances or devices must follow proper safety procedures for each chemical or device used in the research.

Required Signatures: Science Teacher AND a Designated Supervisor or Qualified Scientist (the adult monitoring the student)

Projects Involving Human Test Subjects

(may require add'l paperwork)

- ☐ Consent forms are required for all participants.
- ☐ Parental consent forms required for all participants under 18.
- ☐ Consent forms are not required. The project involves minimal risk.

School Administrator APPROVAL

(required for ALL projects with human test subjects)

I have reviewed and approved this student's research plan **prior to experimentation**.

School Administrator Signature _____

Date _____

Safety APPROVAL – Psychologist, Doctor or Nurse, Biomedical/Biologist Scientist, Veterinarian

Name: _____ Phone: _____

Institution/Position: _____

Email: _____

Signature/Date: _____

Name: _____ Phone: _____

Institution/Position: _____

Email: _____

Signature/Date: _____



This doc must be filled out & signed BEFORE the student begins experimentation.

Sample Junior Division Form, page 2

Student Name(s): _____

Project Title: _____

Supervisor or Qualified Scientist:

Students must have an adult supervisor when working on the project. This may be a parent or guardian, a teacher, or a laboratory supervisor.

I, the Designated Supervisor, certify that:

- I have read the student's plan and understand all safety requirements.
- I have been trained in the techniques to be used by this student prior to the start of experimentation.
- I will provide direct supervision and take responsibility for the safety of my student(s) and any possible participants.
- I will review the project and make sure that only the student's work will be presented by the student at the fair.

Designated Supervisor's Name _____

Email or phone _____

Signature _____

Date _____

Teacher APPROVAL (required for ALL projects):

I have reviewed and approved this student's research plan **prior to experimentation** and it will comply with all the experimental rules of the Texas Science & Engineering Fair.

Teacher Signature _____

Date _____

Phone _____

Research Location:

Locations: Please list the names, addresses, and type of location for each place you plan to conduct your research or work on your problem.

If you work or collect data at a place of business or university, you will need a document showing you had permission to work there.

Facility Type (check all that apply): Home ☐ School ☐ University ☐ Business ☐ Public Facility (Park, Library, etc.) ☐ Other ☐

Location #1: _____ Location #2: _____

Continuation Project: Any project that expands on your previous science fair project by changing a variable or new line of investigation.

Is this project a continuation from last year?

If YES, submit your research plan and abstract from last year and explain how this year's project is different.

Student & Parent/Guardian Signatures:

If this is a team project, each team member and member parent/guardian must sign below.

Students - I certify the following:

- ☐ My science project complies with all the experimental rules of the Science Fair.
- ☐ I have attached a written Research Plan for my project, indicating all materials and planned procedure.
- ☐ I have attached any additional paperwork required for review (surveys and/or informed consent forms, permission to work at business, etc.)
- ☐ I will respect other projects and property.
- ☐ I will treat all fellow participants, judges, volunteers and other science fair staff with respect and courtesy.
- ☐ I understand any violation of the above could result in removal from the competition.

Parents - I have read the agreements above and understand the risks and possible dangers involved in the project plan. I consent to my child participating in this project and I authorize my child to create an online account to enter necessary information for use with their science fair project.

Signature: _____

Signature Parent/Guardian: _____

Date _____

Signature: _____

Signature Parent/Guardian: _____

Date _____

Signature: _____

Signature Parent/Guardian: _____

Date _____

This must be filled out and signed **BEFORE** the student begins experimentation.

This must be filled out and signed **BEFORE** the student begins experimentation.

Sample **Senior Division** Forms (ISEF)

[Checklist for Adult Sponsor \(1\)](#)

[Student Checklist \(1A\)](#)

[Research Plan/Project Summary Instructions](#)

[Approval Form \(1B\)](#)

[Regulated Research Institutional/Industrial Setting Form \(1C\)](#) - 2 pages

[Qualified Scientist Form \(2\)](#)

[Risk Assessment Form \(3\)](#)

[Human Participants Form \(4\)](#)

[Human Informed Consent Form](#)

[Vertebrate Animal Form \(5A\)](#)

[Vertebrate Animal Form \(5B\)](#)

[Potentially Hazardous Biological Agents Risk Assessment Form \(6A\)](#)

[Human and Vertebrate Animal Tissue Form \(6B\)](#)

[Continuation/Research Progression Projects Form \(7\)](#)

Which Forms Require Signatures and Who Can Sign Them

This [document](#) can be used to determine who can sign each ISEF Form. The second tab can be filled out by the teacher to show who is on the school SRC and IRB.

Checklist for Adult Sponsor (I)

Checklist for Adult Sponsor (1)

This completed form is required for ALL projects.

To be completed by the Adult Sponsor in collaboration with the student researcher(s):

Student's Name(s): _____

Project Title: _____

1. ☐ I have reviewed the ISEF International Rules: Guidelines for Science and Engineering Fairs 2023-2024, including the science fair ethics statement.
2. ☐ I have reviewed the student's completed Checklist (1A) and Research Plan/Project Summary.
3. ☐ I have worked with the student and we have discussed the possible risks involved in the project.
4. ☐ The project involves one or more of the following and requires prior approval by an SRC, IRB, IACUC or IBC:
☐ Humans ☐ Potentially Hazardous Biological Agents
☐ Vertebrate Animals ☐ Microorganisms ☐ rDNA ☐ Tissues
5. ☐ Items to be completed for **ALL PROJECTS**
☐ Adult Sponsor Checklist (1) ☐ Research Plan/Project Summary
☐ Student Checklist (1A) ☐ Approval Form (1B)
☐ Regulated Research Institutional/Industrial Setting Form (1C) (when applicable; after completed experiment)
☐ Continuation/Research Progression Form (7) (when applicable)

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 provided and that I have read and agree to abide by the science fair rules and regulations.

Adult Sponsor's Printed Name _____

Signature _____

Date of Review (mm/dd/yy) _____

Phone _____

Email _____

Student Checklist (1A)

Student Checklist (1A)

This form is required for ALL projects.

1. a. Student/Team Leader: _____ Grade: _____
Email: _____ Phone: _____

b. Team Member: _____ c. Team Member: _____

2. Title of Project: _____

Fit as much of the title as possible

3. School: _____ School Phone: _____

School Address: _____

4. Adult Sponsor: _____ Phone/Email: _____

This should be the teacher

5. Does this project need School/IRB/IACUC or other pre-approval? ☐ Yes ☒ No

6. Is this a continuation/progression from a previous year? ☐ Yes ☒ No

If Yes:

a. Attach the previous year's ☐ Abstract **and** ☐ Research Plan/Project Summary

b. Explain how this project is new and different from previous year's

☐ Continuation/Research Progression Form (7)

IF the student has continued his/her project their poster should focus on the work from the current calendar year

7. This year's experimentation/data collection: _____

This should be the date that the student started collecting data, after approvals

Actual Start Date: (mm/dd/yy) _____ End Date: (mm/dd/yy) _____

8. Where will you conduct your experimentation? (check all that apply)

☐ Research Institution ☐ School ☐ Field ☐ Home ☐ Other: _____

9. Source of Data:

☐ Collected self/mentor ☐ Other Describe/url: _____

NOTE this **NEW** field that should be filled out if appropriate

10. List the name and address of all non-home and non-school work locations, whether you worked there virtually or on-site:

Name _____

Address: _____

Phone/email _____

11. **Complete a Research Plan/Project Summary following the Research Plan/Project Summary instructions and attach to this form.**

12. **An abstract is required for all projects after experimentation.**

Research Plan/Project Summary Instructions

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, 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.
 - d. 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:
 - **Procedures:** Detail all procedures and experimental design including 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. If you will use published surveys, questionnaires or tests, describe how you obtained these, including required permission if applicable.
 - **Risk and Safety:** Identify any potential risks and safety precaution
 - **Data Analysis:** Describe the procedures you will use to analyze the
 - d. **BIBLIOGRAPHY:** List major references (e.g. science journal articles, If you plan to use vertebrate animals, one of these references must be

Items 1–4 below are subject-specific guidelines for additional items to be included, if applicable.

1. Human participants research:

- a. **Participants:** Describe age range, gender, racial/ethnic composition, pregnant women, prisoners, mentally disabled or economically disadvantaged.
- b. **Recruitment:** Where will you find your participants? How will they be recruited?
- c. **Methods:** What will participants be asked to do? Will you use any surveys? Did you obtain? Did it require permissions? If so, explain. What is the
- d. **Risk Assessment:** What are the risks or potential discomforts (physical or psychological) to participants? How will you minimize risks? List any benefits to society.
- e. **Protection of Privacy:** Will identifiable information (e.g., names, telephone numbers, addresses) be collected? Will data be confidential/anonymous? If anonymous, describe how the data will be stored and how it will be destroyed. Where will data be stored? How will the data after the study?
- f. **Informed Consent Process:** Describe how you will inform participants of the risks and benefits of the study, 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 the rationale for your choice.
- b. Explain potential impact or contribution of this research.
- c. Detail all procedures to be used, including methods used to minimize pain and distress, and detailed chemical concentrations and drug dosages.
- d. Detail animal numbers, species, strain, sex, age, source, etc., include the source of the animals.
- 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 containment.
- b. Detail safety precautions and discuss methods of disposal.

4. Hazardous chemicals, activities & devices:

- a. Describe Risk Assessment process, supervision, safety precautions and training.
- b. Material Safety Data Sheets are not necessary to submit with paperwork.

The research plan is the most important document because it provides the regional SRC board the necessary details of the planned research.

This detailed description of the research guides the SRC to be able to determine if the proper forms were completed and if they contain the correct information.

Must be VERY detailed and clearly delineate the role of the student vs. the role of the mentor

Entire Research Plan must be in FUTURE tense!!
Must include proposed and actual start and end dates
Must include detailed research plan
Must have all work site information completed
Must identify student and mentor role

Approval Form (IB)

Approval Form (1B)

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

1. To Be Completed by Student and Parent

a. Student Acknowledgment:

- I understand the risks and possible dangers to me of the proposed research plan.
- I have read the ISEF Rules and Guidelines and will adhere to all International Rules when conducting this research.
- I have read and will abide by the science fair ethics statement.

Student researchers are expected to maintain the highest standards of honesty and integrity. Academic misconduct are not condoned at any level of research or competition. Such practices include plagiarism, forgery, use or presentation of other researcher's work as one's own, and fabrication of data. Projects that violate these rules will fail to qualify for competition in affiliated fairs and ISEF.

Student's Printed Name

Signature

Date Acknowledged (mm/dd/yy)
(Must be prior to experimentation.)

b. Parent/Guardian Approval: I have read and understand the risks and possible dangers of the Research Plan/Project Summary. I consent to my child participating in this research.

Parent/Guardian's Printed Name

Signature

Date Acknowledged (mm/dd/yy)
(Must be prior to experimentation.)

This must be dated BEFORE the "Actual Start Date" on form 1A.

This must be dated BEFORE the "Actual Start Date" on form 1A.

2. To be completed by the local or affiliated Fair SRC

(Required for projects requiring prior SRC/IRB APPROVAL. Sign 2a or 2b as appropriate.)

a. Required for projects that need prior SRC/IRB approval BEFORE experimentation (humans, vertebrates or potentially harmful biological agents).

The SRC/IRB Chair/Designee has read and approved the Research Plan/Project Summary. My signature indicates approval of the Research Plan/Project Summary before the start of experimentation.

SRC/IRB Chair/Designee

Signature

Date of Signature (mm/dd/yy)
(Must be prior to experimentation.)

Do NOT write anything in this space unless you are the SRC/IRB Chair or Designee

b. Required for research conducted at all Regulated Research Institutions with no prior fair SRC/IRB approval.

This project was conducted at a regulated institution (not home) and was approved by the proper institutional review and complies with the ISEF Rules and Guidelines. Institutional approval is required.

SRC Chair

Signature

Date of Signature (mm/dd/yy)
(May be after experimentation)

Do NOT write anything in this space

3. Final ISEF Affiliated Fair SRC Approval (Required for ALL Projects)

SRC Approval After Experimentation

I certify that this project adheres to the ISEF Rules and Guidelines and complies with all ISEF Rules.

Regional SRC Chair's Printed Name

State/National SRC Chair's Printed Name
(where applicable)

Date of Approval (mm/dd/yy)

Date of Approval (mm/dd/yy)

Do NOT write anything in this space

Regulated Research Institutional/Industrial Setting Form (1C), page 1 of 2

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. Did you or your proxy (e.g. graduate student, postdoc, employee) provide substantial guidance to the student researcher?

a. If no, describe your and/or your institution's role with this student's project (e.g. supervised use of equipment on site, etc.) and sign below.

b. If yes, complete questions 2–5.

2. Is the student's research project a subset of your ongoing research? Use questions 3, 4 and 5 to detail how the student's project is different from ongoing research or work at your site. If this project is to be acknowledged, please list the grant statement here.

3. Describe the independence and creativity with which the student:
- a. developed the hypotheses or engineering goals for the project

b. designed the methodology for his/her research project

c. analyzed and interpreted data

If any of the research was done at a standard research facility (college, pharmaceutical company, environmental testing facility, etc.), a facility where advanced research is allowed (certain high schools or local labs), or a place of business, the 1C form is **required**.

If the student worked with a mentor other than the science teacher at school, the 1C form is **required**.

If the project is to be a data analysis only and the data is publicly available, then nothing else is needed

If data is covered by privacy rules/laws (ex. Patient data) or from a private source (ex. Proprietary data), then the student must show documentation of how the data became available and how/why they were allowed to view it and study it.

The best thing to do is have the mentor send a short letter on their letterhead explaining that there were no HIPAA violations. This is even if the data was de-identified.

See next page for more questions

(Continued on next page)

Regulated Research Institutional/Industrial Setting Form (1C)
Continued

Student's Name(s) _____

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

5. 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 student names and describe how their work was related or different from the work of this project.

I attest that the student(s) performed the work as indicated above and that any required review and approval by institutional regulatory bodies (e.g. IRB, IACUC/IBC) has been obtained. Copies are attached if applicable. I acknowledge that the student(s) will not be presenting this work publicly in competition and I will meet the requirements for my review and/or restrictions of work.

Supervising Adult's Printed Name	Signature	Title
Institution		Date Signed (must be after experimentation) (mm/dd/yy)
Address		Email/Phone

This should be the **Mentor or Business Manager** NOT the teacher or parent

This must be dated **AFTER** the "End Date" on form 1A

Qualified Scientist Form (2)

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: _____

1. Have you reviewed the ISEF rules relevant to this project and the science fair ethics statement relevant to this project? ☐ Yes ☐ No

2. Will any of the following be used?

- | | | |
|---|------------------------------|-----------------------------|
| a. Human participants | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Vertebrate animals | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Potentially hazardous biological agents (microorganisms, rDNA and tissues, including blood and blood products) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Hazardous substances and devices | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

3. Will this study be a sub-set of a larger study? ☐ Yes ☐ No

4. Will you directly supervise the student? ☐ Yes ☐ No

a. If no, who will directly supervise and serve as the Designated Supervisor?

b. Experience/Training of the Designated Supervisor: _____

To be completed by the Qualified Scientist:

I certify that I have reviewed and approved the Research Plan/Project Summary prior to the start of the experimentation. If the student or Designated Supervisor is not trained in the necessary procedures, I will ensure her/his training. I will provide advice and supervision during the research. I have a working knowledge of the techniques to be used by the student in the Research Plan/Project Summary. I understand that a Designated Supervisor is required when the student is not conducting experimentation under my direct supervision.

Qualified Scientist's Printed Name

Signature

Date of Approval (mm/dd/yy)

To be completed by the Designated Supervisor when the Qualified Scientist cannot directly supervise.

I certify that I have reviewed and approved the Research Plan/Project Summary and have been trained in the necessary procedures to be used by this student, and I will provide advice and supervision during the research.

Designated Supervisor's Printed Name

Signature

Date of Approval (mm/dd/yy)

Phone

Email

Risk Assessment Form (3)

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 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.

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).

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

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

5. List the source(s) of safety information.

To be completed and signed by the Designated Supervisor (or Qualified Scientist, if applicable):

I agree with the risk assessment and safety precautions and procedures described above. I certify that I have read the Research Plan/Project Summary and the International Rules, including the science fair ethics statement, and I will provide direct supervision.

Designated 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 _____

This must be dated **BEFORE** the "Actual Start Date" on form 1A

Human Participants Form (4)

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/DESIGNATED SUPERVISOR/QUALIFIED SCIENTIST:	
1. <input type="checkbox"/> I have submitted my Research Plan/Project Summary which addresses ALL areas indicated in the Human Participants Section of the Research Plan/Project Summary Instructions.	
2. <input type="checkbox"/> I have attached any surveys or questionnaires I will be using in my project or other documentation. <input type="checkbox"/> Any published instrument(s) used was /were legally obtained.	
3. <input type="checkbox"/> I have attached an informed consent that I would use if required by the IRB.	
4. <input type="checkbox"/> Yes <input type="checkbox"/> No Are you working with a Qualified Scientist? If yes, attach the Qualified Scientist's credentials.	

Even though your school IRB may have given approval, the study must conform to all ISEF regulations

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)**
- Risk Level (check one): ☐ Minimal Risk ☐ More than Minimal Risk (a risk assessment form 3 is required).
 - 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)

This form is to be filled out by the SCHOOL IRB and not the regional science fair review committee (SRC). However, be sure that your school IRB is aware of the rules and limitations of student research projects. For more information and the full list of rules:

<https://student.societyforscience.org/human-participants>

<input type="checkbox"/> physician's assistant, doctor of pharmacy, or registered nurse) with expertise related to this project.	
Printed Name	Degree/Professional License
Signature	Date of Approval (Must be dated BEFORE the "Actual Start Date" on form 1A)
Educator	
Printed Name	Degree/Professional License
Signature	Date of Approval (Must be dated BEFORE the "Actual Start Date" on form 1A)
School Administrator	
Printed Name	Degree/Professional License
Signature	Date of Approval (Must be dated BEFORE the "Actual Start Date" on form 1A)

This CANNOT be the same teacher that signed as the "Adult Sponsor"

This must be dated BEFORE the "Actual Start Date" on form 1A

This must be dated BEFORE the "Actual Start Date" on form 1A

This must be dated BEFORE the "Actual Start Date" on form 1A

Human Informed Consent Form

Human Informed Consent Form

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

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

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

Student Researcher(s): _____

Title of Project: _____

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

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: _____

This is just an example of a consent form. You MUST submit a copy of whatever consent form will be used. If the survey will be done online, submit a copy of all of the consent questions as a part of that survey.

Vertebrate Animal Form (5A)

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, designated supervisor or a veterinarian. If applicable, attach this letter with this form when submitting your paperwork to the SRC prior to competition.

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

Level of Supervision Required for agricultural, behavioral or nutritional studies (select one):

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

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

Local or Affiliate Fair SRC Pre-Approval Statement

SRC Chair Printed Name _____

Signature _____

Date of Approval (must be before experimentation) (mm/dd/yy) _____

To be completed by Veterinarian:

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

Printed Name _____

Email/Phone _____

Signature _____

Date of Approval (mm/dd/yy) _____

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

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

Printed Name _____

Email/Phone _____

Signature _____

Date of Approval (mm/dd/yy) _____

This must be dated BEFORE the "Actual Start Date" on form 1A

This must be dated BEFORE the "Actual Start Date" on form 1A

Vertebrate Animal Form (5B)

Vertebrate Animal Form (5B)

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

Student's Name(s) _____

Title of Project _____

Title and Protocol Number of IACUC Approved Project _____

You MUST include a copy of the actual IACUC form with the protocol number

To be completed by Qualified Scientist or Principal Investigator:

1. Species of animals used: _____ Number of animals used: _____

2. Describe, in detail, the role of the student in this project: animal procedures and related equipment that were involved, oversight provided and safety precautions employed. (Attach extra pages if necessary.)

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

4. Did the student's project also involve the use of tissues?

☐

No

☐

Yes; complete Forms 6A and 6B

5. What laboratory training, including dates, was provided to the student?

6. Attach a copy of the Regulated Research Institution IACUC Approval. A letter from the Qualified Scientist or Principal Investigator is not sufficient.

Qualified Scientist/Principal Investigator

Printed Name _____

Signature _____

Date (mm/dd/yyyy) _____

This must be dated **AFTER** the "End Date" on form 1A

Potentially Hazardous Biological Agents Risk Assessment Form (6A)

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/ICUC/IBC approval required before experimentation.

Student's Name(s) _____

Title of Project _____

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

SECTION 1: PROJECT ASSESSMENT

1. Identify potentially hazardous biological agents to be used in this experiment. Include the source, quantity and the biosafety level risk group of each microorganism.

2. Describe the site of experimentation including the level of biological containment.

3. Describe the procedures that will be used to minimize risk (personal protective equipment, hood type, etc.).

4. What final biosafety level do you recommend for this project given the risk assessment you conducted?

5. Describe the method of disposal of all cultured materials and other potentially hazardous biological agents.

SECTION 2: TRAINING

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

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

SECTION 3: For ALL CELL LINES, MICROORGANISMS AND TISSUES – To be completed by the QUALIFIED SCIENTIST or DESIGNATED 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 Review Board prior to experimentation; institutional approval forms are attached.
Origin of cell lines: _____ SRC/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 have an Institutional Review Board. This type of study. The SRC has seen and approved the research plan and supporting documentation. The SRC acknowledges the accuracy of the responses above.

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

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

QS/DS Printed Name

Signature

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)

Human and Vertebrate Animal Tissue Form (6B)

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.

To be completed by the Qualified Scientist or Designated Supervisor:

- ☐ I verify that the student will work solely with organs, tissues, cultures or cells that will be supplied by myself or qualified personnel from the laboratory; and that if vertebrate animals were euthanized the purpose was 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 J - Blood Borne Pathogens.

Printed Name _____

Signature _____

Date of Approval (mm/dd/yy)
(Must be prior to experimentation.)

Title _____

Phone/Email _____

Institution _____

This must be dated **BEFORE**
the "Actual Start Date"
on form 1A

Continuation/Research Progression Projects Form (7)

Continuation/Research Progression Projects Form (7)

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

Student's Name(s) _____

To be completed by Student Researcher: List all components of the current project that make it new and different from previous research. The information must be on the form; use an additional form for previous year and earlier projects.

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		

Continuation projects **MUST** include this form. For the immediately prior year, researcher **MUST** include BOTH the Abstract & Research Plan. For any years farther back, the researcher **MUST** include the Abstract for each additional prior year's work.

FOR ALL projects that were conducted/began before January 1st 2023

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)