

# SENIOR DIVISION RULES QUICK REFERENCE AND FORMS CHECK

## FORMS

All Senior Division projects require forms I, IA, and IB. The list below consists of forms that are required for projects depending on the experimentation being done. The lists for what types of projects require those forms is not a complete list. For a complete list, check the [ISEF rule book](#).

1. Hazardous Materials, Activities, Devices: **Risk Assessment Form (3)**
  - a. Chemicals, poison, acid, petroleum products, paint, glue, fertilizer etc.
  - b. Power tools, knives, sharp or dangerous objects, machinery
  - c. Fire, heat, oven, burner, radiation, electricity, flammable materials/substances
  - d. Any other potentially dangerous situation or activity
  - e. Exempt Micro-Biology, E-coli k12, algae, bio-fuel, bio-fuel cells, etc.
  - f. Projects that involve human participant testing of any project involving student- designed inventions, prototypes or consumer products
  
2. **Human Participant Study: Human Participant Form (4) (IRB Pre-Approval)**
  - a. Surveys, tests, opinion studies, etc.
  - b. Tasting, smelling, exercise, etc.
  - c. Medical procedures, blood sugar, blood pressure, DNA kit, etc.
  - d. Using other people to test a product you created or purchased
  - e. Any research involving humans (including yourself) as test subjects
  
3. **Vertebrate Animal Study: Vertebrate Form (5A) or (5B) (SRC Pre-Approval)**
  - a. Involves any vertebrate animal (dog, cat, fish, chicken, birds, reptiles, etc.)
  
4. **Biological Agents (microbiology): Hazardous Biological Agents Form (6A) (SRC Pre-Approval)**
  - a. Culturing bacteria, mold, or other microorganisms (can't be done at home)
  - b. Prions (must work in regulated research institution with qualified scientist)
  - c. E-Coli K-12 does NOT NEED this form, but must be done in a lab
  
5. **Vertebrate Tissue: Biological Agents Form (6A) & Tissue Form (6B) (SRC Pre-Approval)**
  - a. Blood, blood products (from vertebrate animals or humans)
  - b. Saliva/other bodily fluids (from vertebrate animals or humans)
  - c. Cell or Tissue (from vertebrate animals or humans)

6. Research Done outside home, school or field or with significant contribution from a mentor other than the teacher (including virtual assistance by a mentor): **Regulated Research/Industrial Form (IC)**
  - a. Place of business or commercial/private property (stores, churches, offices, facilities, gyms, hair salon etc.)
  - b. Industrial Location (welding shops, machine shop, mechanic shop, etc.)
  - c. School or University other than the one you attend
  
7. Continuation Project: **Continuation Form (7)**
  - a. Project related to previous year's research

## **RULES QUICK CHECK: COMMON PAPERWORK MISTAKES**

*The rules explained below are some that came up during regional and state fair review of projects. This is not a complete list of rules. This is just meant as a reminder of some of the rules most missed. Please review [all rules](#) prior to reviewing student paperwork.*

- I. Human Participant Study:
  - a. Students who work at a Regulated Research Institution (RRI) must have Institutional Review Board (IRB) approval from the RRI. The school IRB is not sufficient. A copy of the RRI IRB approval must be uploaded in Scienteer.
  - b. Students are prohibited from diagnosing medical conditions, performing medical procedures, or administering medication to human subjects. They may collect data as an observer under direct supervision of a licensed professional at an RRI. The licensed professional must be named in the research plan and approved by the RRI IRB.
  - c. On-line surveys require participant consent and must include a statement similar to the one provided by ISEF: *“There is always the possibility of tampering from an outside source when using the internet for collecting information. While the confidentiality of your responses will be protected once the data are downloaded from the internet, there is always a possibility of hacking or other security breaches that could threaten the confidentiality of your responses. Please know that you are free to decide not to answer any question.”* Surveys should require participants to click a button or type a response indicating consent after the statement is read.
  - d. Form 4 should not have “Not Applicable” selected for any of the age groups of participants. A form 4 indicates that there are human participants, so the IRB needs to select the correct age groups depending on the project and select whether or not written consent is required for those age groups.
  - e. Engineering projects that use human participants, other than the student and a single adult guardian/sponsor, to test or analyze their product require a Form 4 with IRB review. Also, if students test their own engineering product and it requires them to do a physical activity, they need a Form 4 with IRB review.
  - f. The above exemption for students testing their own engineering product that does not require a Form 4 does not extend to projects where students are using themselves as a test subject in an experiment.

**Examples:**

<b>Project Type</b>	<b>Project Explanation</b>	<b>Human Involvement</b>	<b>Form 4 Requirement</b>
Engineering	Computer software created by student researcher	20 Students tested the software	Required
Engineering	Computer software created by student researcher	Researcher or teacher tested software	Exempt
Engineering	Student created system where video game only works when a bicycle is used	Researcher or teacher tested the system and there is a physical component	Required
Experiment	Blood pressure tested while playing different video games	Researcher	Required
Experiment	Bacteria cultured from hands after using different hand sanitizers	Researcher	Required

**2. Vertebrate Animal Study:**

- a. Studies performed at a Regulated Research Institution (RRI) require review by an Institutional Animal Care and Use Committee (IACUC). The IACUC review must be uploaded to STEM Wizard. The IACUC must have the student's name on it or include a letter from the IACUC allowing the student to work on the project.
- b. Students are not allowed to cause pain, distress, or death to animals in their study. An IACUC may allow this type of study, but it will not be allowed at our fair.

**3. Biological Agents (microbiology):**

- a. Culturing bacteria, mold, or other microorganisms can't be done at home.

**4. Regulated Research/Industrial Form (IC)**

- a. Form IC must be completed by the supervising adult at the university or place of business where the research was done, not by the student or teacher.
- b. **NEW for 2023\*** - A Form IC should be filled out by any researcher at an institution who significantly assists a student with their project even if the student works remotely.

## Senior Division - [ISEF Forms with Signatures](#)

Use this document to determine who can sign each ISEF Form.

Form Needed	ISEF Form	Section	Needed By	Dated	Signature Needed	Who Can Sign Here	Name	Email Address
X	1		All Students	Prior To Start Date on Form 1A, Section 7	Adult Sponsor (Teacher)	Teacher or Adult in Charge		
X	1B	1a	All Students	Prior To Start Date on Form 1A, Section 7	Student (For a Team Project, there should be a Form 1B for each student with their parent's signature. Save as 1 pdf before uploading)	Student		
X	1B	1b	All Students	Prior To Start Date on Form 1A, Section 7	Parent	Parent		
	1B	2a	Required for projects that need prior SRC/IRB approval BEFORE experimentation (humans, vertebrates or potentially hazardous biological agents).	Prior To Start Date on Form 1A, Section 7	SRC or IRB Chair	SRC Chair - A biomedical scientist with an earned graduate degree or IRB Chair - Usually the medical or mental health professional on the IRB. <b>This can not be the teacher or anyone related to the student(s).</b>		

	1B	3	Projects advancing to their Regional Science Fair	AFTER End Date on Form 1A, Section 7 and BEFORE Competition Date	Regional SRC Chair - Projects advanced in STEM Wizard will have this approval after ALL forms are approved. If project advances to ISEF, the document will need an actual signature.			
	1B	3	Projects advancing to TXSEF	AFTER End Date on Form 1A, Section 7 and BEFORE Competition Date	State SRC Chair - Projects advanced in STEM Wizard will have this approval after ALL forms are approved. If project advances to ISEF, the document will need an actual signature.			
	1C		Students who work with a mentor (other than teacher) virtually or on site or who work at a research institution, industrial setting, or any place other than home, school, or field (such as a park or open field).	AFTER End Date on Form 1A, Section 7	Mentor, Supervising Adult, or Whoever gave permission for the student to work at that location	Mentor, Supervising Adult, or Whoever gave permission for the student to work at that location. <b>This should not be the teacher or parent (unless it is the parent's lab or business).</b>		

	2		May be required for research involving human participants, vertebrate animals, potentially hazardous biological agents, and hazardous substances and devices.	Prior To Start Date on Form 1A, Section 7	Qualified Scientist. This signature is required if the project needs form 2.	Person who earned a professional degree or has extensive experience in the student's area of research and will supervise the student or coordinate with a designated supervisor to serve in that capacity		
	2		May be required for research involving human participants, vertebrate animals, potentially hazardous biological agents, and hazardous substances and devices. ONLY Need this signature if Qualified Scientist isn't supervising the student.	Prior To Start Date on Form 1A, Section 7	Designated Supervisor signs ONLY if the Qualified Scientist won't be able to directly supervise the student.	Person familiar with student's project that will directly supervise work		
	3		Recommended for all projects. May be required for projects involving Human Participants, Hazardous Chemicals, Materials or Devices or Potentially Hazardous Biological Agents.	Prior To Start Date on Form 1A, Section 7	Designated Supervisor or Qualified Scientist who will supervise the student during experimentation.	Person who will supervise the student during experimentation		

	4	Required for all research involving human participants not at a Regulated Research Institution. If at a Regulated Research Institution, use institutional IRB approval forms for documentation of prior review and approval.	Prior To Start Date on Form 1A, Section 7	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.	Medical or Mental Health Professional on IRB. <b>This can not be the teacher or anyone related to the student(s).</b>		
	4	Required for all research involving human participants not at a Regulated Research Institution. If at a Regulated Research Institution, use institutional IRB approval forms for documentation of prior review and approval.	Prior To Start Date on Form 1A, Section 7	Educator (can not be adult sponsor/teacher)	Another teacher. <b>Can not be the adult sponsor.</b>		
	4	Required for all research involving human participants not at a Regulated Research Institution. If at a Regulated Research Institution, use institutional IRB approval forms for documentation of prior approval.	Prior To Start Date on Form 1A, Section 7	School Administrator	Preferably the Principal or Assistant Principal		

	5A		Required for all research involving vertebrate animals that is conducted in a school/home/field research site.	Prior To Start Date on Form 1A, Section 7	SRC Chair	A biomedical scientist with an earned graduate degree. <b>This can not be the teacher or anyone related to the student(s).</b>		
	5A		May be required for all research involving vertebrate animals that is conducted in a school/home/field research site.	Prior To Start Date on Form 1A, Section 7	Veterinarian	Veterinarian		
	5A		May be required for all research involving vertebrate animals that is conducted in a school/home/field research site.	Prior To Start Date on Form 1A, Section 7	Designated Supervisor or Qualified Scientist who will supervise the student during experimentation.	Person who will supervise the student during experimentation		
	5B		Required for all research involving vertebrate animals that is conducted at a Regulated Research Institution. You must include IACUC approval form dated before experimentation.	AFTER End Date on Form 1A, Section 7	Qualified Scientist or Principal Investigator	Person who supervised the student during experimentation		



	6A	3	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.	Prior To Start Date on Form 1A, Section 7	Designated Supervisor or Qualified Scientist who will supervise the student during experimentation.	Person who will supervise the student during experimentation		
	6A	4	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.	Prior To Start Date on Form 1A, Section 7	SRC Chair	A biomedical scientist with an earned graduate degree. <b>This can not be the teacher or anyone related to the student(s).</b>		
	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	Prior To Start Date on Form 1A, Section 7	Designated Supervisor or Qualified Scientist who will supervise the student during experimentation.	Person who will supervise the student during experimentation		

			listed above must also complete Form 6A.					
	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.	Prior To Start Date on Form 1A, Section 7	Student	Student		