

TO ALL SCIENCE FAIR TEACHERS, ADVISORS AND STUDENTS FROM THE SRC (Scientific Review Committee)

The Rules for the 2010 Science Fair can be found at <http://www.tcrsf.org/completerules2010.pdf>
We are an ISEF affiliated Fair and must abide by these rules. We urge you to review these rules BEFORE starting science fair projects. If you have any questions please contact src@tcrsf.org. A Science Project Primer can be found at <http://www.societyforscience.org/isef/primer/index.asp>

The following is a review of the 4 primary committees dealing with experimental procedures, safety concerns, display considerations and awards.

A. Institutional Review Board (IRB)

An Institutional Review Board is a committee that, according to federal regulations must evaluate the potential physical and/or psychological risk of research involving human subjects before research begins. This includes a review of any surveys or questionnaires to be used in a project.

Any project involving HUMANS must be reviewed and approved by the IRB BEFORE research begins. **Please check the new Humans Subjects Form 4 and the suggested “Informed Consent” form.**

All schools must have an IRB in place BEFORE research begins. The teacher/advisor cannot serve on the IRB for his/her students. You can use more than one teacher/advisor on your IRB to cover all your students. **“Educator” replaces the “Science Educator” for Membership on the IRC.** If you are home schooled or your school does not participate in science fair, you may contact the Scientific Review Committee (see below) directly.

Federal regulations require local community involvement, therefore an IRB should be established at the school level to evaluate human research projects. An IRB at the school or ISEF Affiliated Fair level must consist of a minimum of three members. In order to eliminate conflict of interest, the Adult Sponsor, parents, the Qualified Scientist, and the Designated Supervisor who oversee a specific project must not serve on the IRB reviewing that project. Additional members are recommended to help avoid this conflict of interest and to increase the expertise of the committee. This IRB must include:

- a) an Educator
- b) a school administrator (preferably, a principal or vice principal),
- c) one of the following who is knowledgeable and capable of evaluating the physical and/or psychological risk involved in a given study: a medical doctor, physician’s assistant, registered nurse, a psychiatrist, psychologist, licensed counselor (professional, mental health) or licensed social worker.

ALL DATES MUST BE **BEFORE THE** ACTUAL DATE RESEARCH BEGINS!

NOTE: Actual Start Date is on Form 1A. **IRB must also sign off on Form 1B.**

B. Scientific Review Committee (SRC)

The SRC is organized at the Regional Level and is responsible for evaluation of student research, certifications, research plans and exhibits for compliance with the Rules and pertinent laws and regulations.

The Twin Cities Regional SRC requires that any proposed projects in the following areas must be reviewed and approved by an IRB or SRC BEFORE experimentation begins: Projects involving vertebrates,

potentially dangerous biological agents (molds of any type, bacteria, gene research, **any** tissues, etc. ALL such experiments must be done in a school lab or other regulated facilities.)

Potentially dangerous means ALL projects involving petri dishes or culturing microorganisms (including pure, safe strains) because of the possibility of contamination. All microorganisms (including bacteria, viruses, viroids, prions, rickettsia, fungi, and parasites) are considered hazardous for purposes of SRC approval except for baker's yeast and brewer's yeast (rDNA studies require prior approval), commercially-available coliform water test kits, studies involving Lactobacillus, Bacillus thurgensis, nitrogen-fixing, oil-eating bacteria and algae-eating bacteria introduced into their natural environment. (These are not exempt from prior approval if cultured in a petri dish environment that could potentially be contaminated).

Human experimentation (**including surveys**) must have previous school IRB approval as well as SRC approval.

ALL projects must be reviewed and approved by the SRC after experimentation and shortly before competition in an ISEF-affiliated Fair competition. Projects requiring pre-approval which were conducted at a regulated research institution (not home or high school, etc.) and which were reviewed and approved by the proper institutional board before experimentation must also be reviewed by the Fair SRC for rules compliance.

Please go to the ISEF website and review the Rules and Guidelines or download them from our website:

<http://www.tcrsf.org/completerules2010.pdf>

C. The Safety and Display Committee (SDC)

The SDC is the final authority on display and safety issues for projects approved by the SRC.

Please go to the ISEF website and review the Intel ISEF Project Display and Safety Regulations.

<http://www.tcrsf.org/completerules2010.pdf>

D. Awards Committee (AC)

The AC is made up of members of the Fair Committee and other volunteers with expertise in many Scientific Areas.

The Awards Committee is responsible for the selection and dispersion of all Fair awards. The Fair Committee is the final authority on all awards issues.

ISEF/SPONSOR AWARDS: We have many requirements and forms that must be filled out regarding Sponsor Winners and ISEF Finalists. Many of these are time sensitive. We must require ALL Sponsor Winners, ISEF Finalists and Alternates to be present at the Awards Ceremony. If the Finalist or Sponsor Winner is not present the award will be given to the Alternate/s. ALL team members must be at the judging and at the awards ceremony. All decisions regarding awards are finalized by TCRSF's board.

AFFILIATION: We are required by our St. Paul Affiliation that any ISEF Finalist selected from the City of St. Paul must not only live in the City Boundaries but must also attend a school located in the St. Paul School District. See our website Affiliations page for complete description of our affiliations.

SRC Pre –Approval: This can be done by e-mailing the RESEARCH PLAN ONLY and the grade level of the student (grade 6, 7, 8, or 9-12) to src@tcrsf.org. If more information is needed we will notify you.

FORM AND REGISTRATION REQUIREMENTS FOR 2010:

Every Participant: Registration Form
Signed Photo Release
Fee \$20 per participant
Form 1 - fully filled out and dated BEFORE Start Date.
Form 1A- ACTUAL Start Date must be filled in.
Form 1B – Dated BEFORE Start Date.
This includes the Parent Signature.
IRB must sign Form 1B part 2a for all human, vertebrate and biological experiments.
All other forms depend on the subject of the experiment. Refer to <http://www.tcrsf.org/completerules2010.pdf> for experimental requirements.

Again, all dates must be BEFORE THE ACTUAL START DATE except for FORM 1C.

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CHANGES AND SPECIAL AREAS OF CONCERN:

- > Bacterial samples can be gathered outside of school but MUST be cultured in a BSL-1 or BSL-2 facility. NOTHING IS TO BE GROWN AT HOME, EVEN FOR OBSERVATION.
- > All chemicals/hazardous materials must have the MSDS sheets available for inspection.
- > Check the suggested consent form. Send in only ONE sample for review/registration.
- > The IRB now has more responsibility. NOTE THAT “SCIENCE TEACHER” HAS BEEN REPLACED WITH “EDUCATOR”.
- > The Research Plan Instructions have been expanded. DO NOT send in the instruction page with the registration.
- > ANY HIGH SCHOOL STUDENT WHO PARTICIPATED IN THE SCIENCE FAIR LAST YEAR IS CONSIDERED TO BE DOING A CONTINUATION PROJECT AND MUST INCLUDE FORM 7 WITH THE ABSTRACT AND RESEARCH PLAN FROM LAST YEAR’S PROJECT. ANY EARLIER PROJECTS REQUIRE ONLY THE ABSTRACT.

SRC Pre-APPROVAL:

Please get Pre-Approval BEFORE starting any project involving HUMANS, VERTEBRATES OR POTENTIALLY HAZARDOUS BIOLOGICAL AGENTS.

E-Mail your RESEARCH PLAN ONLY to src@tcrsf.org

If you have any questions please ask. src@tcrsf.org