

# **Rules for All Projects**

## **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 the Intel ISEF. The Blue Ridge Highlands Regional Science Fair reserves the right to revoke recognition of a project subsequently found to have been fraudulent.

## **Eligibility/Limitations**

1. Each ISEF-affiliated fair may send the number of projects provided by their affiliation agreement.
2. A student must be selected by an Intel ISEF-affiliated fair, and:
  - a. be in grades 9-12 or equivalent;
  - b. not have reached age 20 on or before May 1 preceding the Intel ISEF.
3. Each student is only allowed to enter one project. That project may include no more than 12 months of continuous research and may not include research performed before January 2016.
4. Team projects must have no more than three members. Teams competing at the Blue Ridge Highlands Regional Science Fair and Intel ISEF must be composed of members who all meet Intel ISEF eligibility.
5. Students may compete in only one Intel ISEF affiliated fair, except when proceeding to a state/national fair affiliated with the Intel ISEF from an affiliated regional fair.
6. Projects that are demonstrations, 'library' research or informational projects, 'explanation' models or kit building are not appropriate for the Intel ISEF.
7. All sciences (physical, life, social) are represented at the Intel ISEF. Review a complete list of categories and sub-categories with definitions.
8. 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.

# Requirements

## General

1. All domestic and international students competing in an Intel ISEF-affiliated fair must adhere to all of the rules as set forth in this document.
2. All projects must adhere to the Ethics Statement above.
3. It is the responsibility of the student and the Adult Sponsor to evaluate the study to determine if the research will require 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.
7. Intel ISEF exhibits must adhere to Intel ISEF display and safety requirements.
8. All projects must adhere to the requirements of the affiliated fair(s) in which it competes to qualify for participation in the Intel ISEF. Affiliated fairs may have additional restrictions or requirements. Knowledge of these requirements is the responsibility of the student and Adult Sponsor.

## Approval and Documentation

1. Before experimentation begins, a local or regional Institutional Review Board (IRB) or Scientific Review Committee (SRC) associated with the Intel ISEF-affiliated fair must review and approve most projects involving human participants, vertebrate animals, and potentially hazardous biological agents. Note: If a project involves the testing of a student designed invention, prototype or concept by a human, an IRB review and approval may be required prior to experimentation. See Human Participants Rules for details.
2. Every student must complete the [Student Checklist \(1A\)](#), a [Research Plan](#) and [Approval Form \(1B\)](#) and review the project with the Adult Sponsor in coordination with completion by the Adult Sponsor of the [Checklist for Adult Sponsor \(1\)](#).
3. A [Qualified Scientist](#) is required for all studies involving Biosafety Lab-2 (BSL-2) potentially hazardous biological agents and DEA-controlled substances and is also required for many human participant studies and many vertebrate animal studies.
4. After initial IRB/SRC approval (if required), any proposed changes in the [Student Checklist \(1A\)](#) and **Research Plan** must be re-approved before laboratory experimentation/data collection resumes.
5. Projects which are continuations of a previous year's work and which require IRB/SRC approval must undergo the review process with the current year proposal prior to experimentation/data collection for the current year.
6. Any continuing project must document that the additional research is new and different. ([Continuation Projects Form \(7\)](#)).
7. If work was conducted in a regulated research institution, industrial setting or any work site other than home, school or field at any time during the current Intel ISEF project year, the [Regulated Research Institutional/Industrial Setting Form \(1C\)](#) must be completed and displayed at the project booth.
8. After experimentation, each student or team must submit a (maximum) 250-word, one-page abstract which summarizes the current year's work. The abstract must describe research conducted by the student, not by the supervising adult(s).
9. A project data book and research paper are not required, but are strongly recommended for judging purposes. Regional or local fairs may require a project data book and/or a research paper.

10. All signed forms, certifications, and permits must be available for review by all regional, state, national and international affiliated fair SRCs in which the student(s) participate. This review must occur after experimentation and before competition.

## **Continuation/ Research Progression of Projects**

1. As in the professional world, research projects may build on work performed previously. A valid continuation project is a sound scientific endeavor. Students will be judged only on laboratory experiment/data collection performed over 12 continuous months beginning no earlier than January 2016 and ending May 2017.
2. Any project based on the student's prior research could be considered a continuation/research progression project. These projects must document that the additional research is a substantive expansion from prior work (e.g. testing a new variable or new line of investigation). Repetition of previous experimentation with the same methodology and research question, even with an increased sample size, is an example of an unacceptable continuation.
3. The display board and abstract must reflect the current year's work only. The project title displayed in the finalist's booth may mention years (for example, "Year Two of an Ongoing Study"). Supporting data books (not research papers) from previous related research may be exhibited if properly labeled as such.
4. Longitudinal studies are permitted as an acceptable continuation under the following conditions:
  - a. The study is a multi-year study testing or documenting the same variables in which time is a critical variable. (Examples: Effect of high rain or drought on soil in a given basin, return of flora and fauna in a burned area over time.)
  - b. Each consecutive year must demonstrate time-based change.
  - c. The display board must be based on collective past conclusionary data and its comparison to the current year data set. No raw data from previous years may be displayed.
5. All projects must be reviewed and approved each year and forms must be completed for the new year.

NOTE: For competition in the Intel ISEF, the [Continuation/ Research Progression Project Form \(7\)](#) is required for projects in the same field of study as a previous project. This form must be displayed at the project booth. Retention of all prior years' paperwork is required and must be presented to the Intel ISEF SRC upon request.

## Team Projects

1. Team projects compete and are judged in the scientific category of their research at the Intel ISEF. All team members must meet the eligibility requirements for Intel ISEF.
2. Teams must have no more than three members. A team with members from different geographic regions may compete at an affiliated fair of one of its members, but not at multiple fairs. However, each affiliated fair holds the authority to determine whether teams with members outside of a fair's geographic territory are eligible to compete, understanding that if the team wins the right to attend Intel ISEF, all team members' expenses must be supported by the fair.
  - a. Team membership cannot be changed during a given research year unless there are extenuating circumstances and the local SRC reviews and approves the change, including converting a team project to an individual project or vice versa. Such conversions must address rationale for the change and include a clear delineation between research preceding the change and that which will follow. A memorandum documenting this review and approval should be attached to Form 1A.
  - b. Once a project has competed in a science fair at any level, team membership cannot change and the project cannot be converted from an individual project to a team project or vice versa.
  - c. In a future year, any project may be converted from an individual to a team project, from a team to an individual project and/or have a change in team membership.
3. 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 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.
4. Each team member must submit an [Approval Form \(1B\)](#). Team members must jointly submit the [Checklist for Adult Sponsor \(1\)](#), one abstract, a [Student Checklist \(1A\)](#), a [Research Plan](#) and other required forms.
5. Full names of all team members must appear on the abstract and forms.

## Sources of Information for ALL Projects

1. United States Patent and Trade Office  
Customer Service: 1-800-786-9199 (toll-free);  
571-272-1000 (local); 571-272-9950 (TTY)  
[www.uspto.gov/](http://www.uspto.gov/)  
[www.uspto.gov/patents/process/index.jsp](http://www.uspto.gov/patents/process/index.jsp)
2. European Patent Office  
[www.epo.org/](http://www.epo.org/)  
[www.epo.org/applying/basics.html](http://www.epo.org/applying/basics.html)
3. The Mad Scientist Network at Washington University School of Medicine:  
[www.madsci.org](http://www.madsci.org)
4. ANS Task Force  
[www.anstaskforce.gov](http://www.anstaskforce.gov)  
Aquatic Nuisance Species (ANS) Task Force  
[www.anstaskforce.gov](http://www.anstaskforce.gov)  
[www.anstaskforce.gov/Documents/ISEF.pdf](http://www.anstaskforce.gov/Documents/ISEF.pdf)
5. APHIS  
[www.aphis.usda.gov/](http://www.aphis.usda.gov/)  
Animal and Plant Health Inspection Service  
Invasive Species List
6. Invasive Species Specialist Group  
[www.issg.org](http://www.issg.org)  
The Global Invasive Species database contains invasive species information supplied by experts from around the world.
7. Invasive Species Information  
[www.invasivespeciesinfo.gov/resources/lists.shtml](http://www.invasivespeciesinfo.gov/resources/lists.shtml)  
Provides information for species declared invasive, noxious, prohibited, or harmful or potentially harmful.
8. Success with Science: The Winner's Guide to High School Research  
Gaglani, S. and DeObaldia, G. (2011). Research Corporation for Science Advancement.  
ISBN 0-9633504-8-X