

GSDSEF Roles and Responsibilities of Students and Adults

Student Researcher

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 the GSDSEF, 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 in at the GSDSEF and subsequent affiliated national and international fairs.

Adult Advisor (Teacher/Advisor or Sponsor)

The Adult Advisor (teacher/advisor or sponsor) is usually a teacher at the school the student attends. This person is the primary contact with GSDSEF for applications, paperwork, etc.

Responsibilities

The Adult Advisor (Teacher/Advisor or Sponsor)...

- takes responsibility for submitting and signing paperwork. If the project was done at school, the sponsor is also responsible for active supervision of the experimentation.
- is responsible for working with the student to evaluate any possible risks involved in order to ensure the health and safety of the student conducting the research and the humans and/or animals involved in the study.
- must review the student's Project Proposal Plan and ensure that:
 - a) experimentation is within GSDSEF rules and regulations, state, and Federal laws and Intel ISEF rules;
 - b) any special Certification forms required are completed and signed, or check with the Scientific Review Committee for approvals.
 - c) forms are completed by other required adults before the student begins the project;
 - d) criteria for the Qualified Scientist adhere to those set forth below.
- is responsible for ensuring the student's research is eligible for entry in the GSDSEF.
- keeps on file student's Project Proposal and any other needed completed/signed Certification forms
- ensures students follow all deadlines.
- ensures students submits project for screening before the school deadline.

- informs students of status or project (Recommended/Not Recommended) and screener's comments.
- ensures students who have been "recommended" complete the 2 Part Application process (online application and mail-in completed/signed Information/Signature form with fee payment).

Teachers (or other Adult Sponsor)

Normally, an Adult Sponsor is either a student's teacher or a 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 working with the student to evaluate any possible risks involved in order to ensure the health and safety of the student conducting the research and the humans and/or animals involved in the study. The Adult Sponsor must review the student's Student Checklist (1A) and Research Plan to certify that that: a) experimentation is within local, state, and Federal laws and Intel ISEF rules; b) forms are completed by other required adults; and c) criteria for the Qualified Scientist adhere to those set forth below.

The Adult Sponsor must be familiar with the regulations that govern potentially dangerous research as they apply to a specific student project. These may include chemical and equipment usage, experimental techniques, research involving human and/or vertebrate animals, and cell cultures, microorganisms, or animal tissues. Regulations must be discussed with the student when completing the Research Plan. Some experiments involve procedures or materials that are regulated by state, federal or non-U.S. national laws. If not thoroughly familiar with the regulations, the Adult Sponsor should help the student enlist the aid of a Qualified Scientist.

The Adult Sponsor is responsible for ensuring the student's research is eligible for entry in the GSDSEF.

The 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. A PhD, MD or a master's degree with additional experience and expertise in the student's area of research is acceptable when approved by a Scientific Review Committee (SRC). The Qualified Scientist must be thoroughly familiar with local, state, and federal regulations that govern the student's area of research.

The Qualified Scientist and the Adult Sponsor may be the same person, if that person is qualified as described above. A student may work with a Qualified Scientist in a city, state or country that is not where the student resides. In this case, the student must work locally with a Designated Supervisor (see below) who has been trained in the techniques to be applied by the student.

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 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. The operation and composition of the local and Affiliated Fair SRCs must fully comply with the International Rules.

A Scientific Review Committee (SRC) examines projects for the following:

- evidence of literature search and appropriate attribution
- evidence of proper supervision
- use of accepted and appropriate research techniques
- completed forms, signatures and dates showing maximum of one year duration of research and appropriate preapproval dates (where required)
- evidence of search for alternatives to animal use
- humane treatment of animals
- compliance with rules and laws governing human and/or animal research and research involving potentially hazardous biological agents and hazardous chemicals, activities, or devices
- documentation of substantial expansion for continuation projects
- compliance with the ISEF ethics statement

GSDSEF e-Mentor

The mentor provides specialized technical guidance in the specific area of the student's research. Students can request help from professionals in different areas of science and engineering. Students can ask questions to make sure their project idea is clear and specific enough, or to make sure procedures are thought through, if they have adequate controls, and they use appropriate measurements. The e-mentors are not to help a student decide on a project or to provide a student with a lab or materials. Mentors can offer suggestions to improve project and to offer advice with data analysis, graphing, by guiding students.