

Roles and Responsibilities of Students and Adults in ISEF Science Fair Projects

The following information is a direct excerpt from the ISEF rules manual (with the exception of additional added red text each role provide some context and added highlighted underlining for emphasis).

Please use the following information to clarify the differences between Adult Sponsor, Qualified Scientist, and Designated Supervisor.

Adult Sponsor

NOTES:

- When a student is completing their project through their school, the Adult Sponsor is typically the student's teacher.

Qualifications:

- An Adult Sponsor may be a teacher, parent, professor, and/or other professional scientist
- Should be knowledgeable in the area of student research, be familiar with the regulations around procedures and materials that apply to the student project, particularly when involving human participants, vertebrate animals, potentially hazardous biological agents or hazardous chemicals, devices or activities.
- Should have close contact with the student throughout the timeline of the project.

Responsibilities:

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.
- Reviewing the student's Student Checklist (1A) and Research Plan/Project Summary (the Lab Rat App facilitates this review and no additional forms completion is needed) to ensure that:
 - experimentation follows local, state, and Federal laws and ISEF rules
 - forms are completed by other required adults (handled by Lab Rat)
 - any required Qualified Scientist meets the criteria as set forth in the ISEF Rules and Guidelines
 - the student's research is eligible for entry in ISEF

Qualified Scientist

NOTES:

- The Qualified Scientist must have professional training and expertise in the field. The Qualified Scientist can provide review and guidance to the student and a Designated Supervisor without the Qualified Scientist directly participating in the project.
- Example: If a student is completing a bacterial project that requires a Qualified Scientist, the student can complete that project with a teacher lacking formal microbiology training if support is provided by a properly credentialed Qualified Scientist and the teacher acting as a Designated Supervisor.
- Understanding the relationship and interaction of Qualified Scientist and Designated Supervisor roles:
 - Supervision when specialty training or procedures are required for potentially hazardous biological agents. In this case the Qualified Scientist could directly work with the student, in which case the Designated Supervisor is not needed. If the Qualified Scientist does not intend to directly work with the student, they can review the plans and provide training for a Designated Supervisor and the student, with the Designated Supervisor directly supervising the work.
 - If a student works in a Regulated Research Institution, oftentimes the lab's Principal Investigator (PI) will provide large scale guidance and then have the student work with a graduate student, lab technician, etc. on the project. In this case the PI would be the Qualified Scientist and the lab member supervising is the Designated Supervisor. Note that in this case the lab member would likely qualify as a Qualified Scientist themselves, but the above arrangement ensures that the PI is also included in review and approval.

Qualifications:

- Earned a doctoral/professional degree in a scientific discipline related to student's area of research

AND/OR

- Individual with extensive experience and expertise in the student's area of research
- Must be thoroughly familiar with the following regulations that govern the student's area of research including all local, state, Federal and if applicable, non-U.S. national regulations and laws.
- Can also serve as the Adult Sponsor, if that person meets both sets of qualifications
- May live elsewhere and not be local to the student, in which case, a Designated Supervisor has been appointed and trained to serve as the onsite supervision as necessary for the specific student project.

Responsibilities:

The Qualified Scientist is responsible for:

- Reviewing the ISEF rules relevant to the project and approving the student's research plan or engineering design prior to the start of experimentation (handled by Lab Rat)
- Providing direct supervision throughout the timeline of the project or coordinating with a Designated Supervisor to serve in this capacity
- Ensuring the proper training of the Student Researcher and/or Designated Supervisor in the necessary procedures
- Completing the required documentation which may include the Regulated Research Institutional Setting Form (1C), the Qualified Scientist Form (2) and the Risk Assessment Form (3), when applicable. (handled by Lab Rat)

Designated Supervisor

NOTES:

- A Designated Supervisor is most commonly needed in one of three common situations:
 - Adult supervision when a project has potential hazards. When this supervision doesn't require specific training or expertise an adult family member or the student's teacher typically fills this role.
 - The two situations discussed in the "Understanding the relationship and interaction of Qualified Scientist and Designated Supervisor roles" section under Qualified Scientist section above.

Qualifications:

- Does not need an advanced degree
- Must be familiar with the student's project and agree to any training necessary
- May also serve as the Adult Sponsor for the project
- If the project involves the use of Vertebrate Animals (where behavior/habitat is influenced by humans), must be knowledgeable about the humane care and handling of the animals

Responsibilities:

- Providing direct supervision of the student experimentation
- Completing the required documentation — the Designated Supervisor box on the Qualified Scientist Form (2) when applicable (handled by Lab Rat)
- Reviewing and completing the Risk Assessment Form (3) when needed. (handled by Lab Rat)

Source:

<https://www.societyforscience.org/isef/international-rules/roles-and-responsibilities-of-students-and-adults/>