

## Science Fair Adult Volunteer Opportunities

We need volunteers!! Here are the requirements and basic responsibilities for each category of volunteer needed. We will provide a brief training and literature for volunteers, so that you will have a better understanding of the expectations for each position.

If you aren't able to serve in any of these categories but still want to help out...I know I can find work for you to do! Especially the evening of the fair. We could use help with set-up, and it might be nice to have hors-d'oeuvres and treats, too...as long as they're not near the displays!

If you'd like to volunteer, please email me at [jeni@slarts.org](mailto:jeni@slarts.org). I look forward to working with you and getting to know you better! Please also let me know if you have questions.

**Adult Sponsor:** An adult sponsor may be a teacher, parent, university professor, or scientist. This individual must have a solid background in science and will have close contact with the student during the course of the project.

The sponsor is responsible for working with the student to evaluate any possible health and safety risks. This person will ensure that experimentation is done within local, state, and federal laws, and that any required forms and documentation are completed. Thus, the sponsor must be familiar with the regulations that govern potentially hazardous research.

Most potentially hazardous projects will be weeded out early in the process, when students submit a project plan. For example, we will probably decline any request to culture bacteria during the project because of the strict regulations that must be followed. We will also carefully examine any project involving animals or human subjects.

Most projects won't require an adult sponsor. However, if a student requests a sponsor, or if the Institutional Review Board recommends a sponsor, we will pair students and sponsors appropriately.

**Qualified Scientist:** A Qualified Scientist and Adult Sponsor may be the same individual. A qualified scientist is required for all projects involving BSL-2 potentially hazardous biological agents (these projects probably won't even be allowed!), DEA-controlled substances (these projects also probably won't be allowed!), more than minimal risk in human subjects and for many vertebrate animal studies.

Again, we will probably weed out most of these studies before they get off the ground. Students will have opportunities to do riskier studies in high school and college if interests take them in that direction.

**Institutional Review Board (IRB):** a committee that, according to federal regulations, must evaluate the potential physical and/or psychological risk of research involving **human** subjects. All proposed human research must be reviewed and approved by the IRB before experimentation begins. This includes any surveys or questionnaires to be used in a project.

An IRB must consist of a minimum of at least three members. To eliminate conflict of interest, the adult sponsor or parents of the child may not serve on the committee reviewing that particular project. The IRB must include:

- a. a science teacher
- b. a school administrator (preferably principal or vice-principal...meaning Amy, of course)
- c. and at least 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, psychiatrist, psychologist, or licensed social worker.

**Animal Use and Care Committee:** Federal regulations apply to all studies involving vertebrate animals. When possible, students will be asked to modify the study to involve invertebrates. Anyone wishing to serve on this committee will need to attend a training to learn about federal regulations and how to complete the appropriate documentation. You will then oversee projects involving animal use, to ensure that students are conducting ethical, humane research and complying with federal regulations.

**Science Fair Judge:** Judges must have some experience or expertise in the category they wish to judge (I'll get these categories out to you later). We will hold a training session in early February, explaining how judging is to be conducted. All judges must be available on the afternoon of the Science Fair. Students will set up their display boards, abstracts, and journals after school. Judges will score projects in your area of expertise. Scores will then be tallied so that winners can be acknowledged during the awards ceremony that evening.

Of course, judges may not score any projects that they have assisted in the roles of Adult Sponsor/Qualified Scientist, or a project completed by their child.

You may also be asked to participate as a judge in the regional Science Fair to be held March 27-28 at the University of Utah.