

2008 Colorado Science and Engineering Fair Scientific Review Committee Report

This year, we had 284 projects to review and the SRC Determinations (after corrections were sent in) broke out as follows:

- Complete Projects – 194 (68.3%)
- Minor Corrections Needed – 32 (11.3%)
- Major Corrections Needed – 14 (4.9%)
- Questions Needing Answered – 17 (6.0%)
- Interviews – 25 (8.8%)
- Violations – 0 (0.0%)

The response to e-mails and faxes sent out was pretty good, but could have been better. We were able to fix a lot of the problems prior to CSEF. The most common minor issues were:

- Forms missing. Sometimes it was just one form, but there were MANY packets that we did not receive until the day before the CSEF – this cannot happen again as it puts us in a terrible situation of not having enough time to review.
- Form 1 not being marked correctly for the type of project.
- Form 1 A not having correct addresses for work sites. Remember that a P O Box is NOT a work site – physical locations need to be given.
- Form 4 not having the Medical Professional identified properly. Remember to have them circle their designation.

The issues that caused the most concern for the SRC were:

- Invalid IRBs. Remember that Adult Sponsors, Qualified Scientists, Designated Supervisors, and Parents CANNOT be a member of the IRB reviewing a human subjects project. It is a conflict of interest – you want fresh sets of eyes reviewing the procedures.
- Not having enough information in the procedures to determine exactly what was done. The more information that is given about what the student did for the experimentation part of the project the better.
- Missing a Risk Assessment Form 3 for obviously hazardous items used in the project. It would be prudent to have all students complete this form for every type of project – it is a great teaching tool.
- Missing critical information and regulatory board review paperwork for projects done at Regulated Research Institutes. Remember that all universities and research labs will have their own IRB and SRC that should be reviewing a student's project prior to their doing work there (where applicable – animals, biological hazards, and humans).

The Intel International Science and Engineering Fair SRC has been made very few changes to the forms and rules for 2009. These changes include:

- Clarifying that ingestion, tasting, smelling, application of a substance or exposure to any potentially hazardous materials is an example of an activity containing MORE THAN MINIMAL RISK for studies involving human subjects.
- Clarifying which studies involving behavioral observations of animals are exempt from prior SRC review and approval.
- Frozen tissue is to be treated the same as fresh tissue.
- Clarifying which microorganisms a Form 3 is no longer required.
- Clarifying the rules regarding firearms and explosives.
- Changing the term "science teacher" to that of "science educator" for membership on an IRB and SRC.