## DR. DALLEY'S TIP SHEET

## Science fair projects help you learn about the Scientific Method and how to explain a technical thing to someone else.

Winning in a competition is nice, but not important in the long run.

I was president of the Dallas Regional Fair for 11 years. I saw students make the same mistakes many years. Below are some tips to help you avoid the common ones.

- Keep a hand-written log book while you are experimenting and bring it to the fair. Never erase anything in it and do not "copy it out neatly". Many judges like to see these as it shows them you actually did the experiment, encountered difficulties, got strange results, changed your plan, etc., all the things that happen in a real scientific research experiment.
- If you are repeating a "cook-book" experiment, try to make it your own by also varying some of the conditions or measuring something slightly different. Make sure your variations are clearly stated on your board and in the interview.
- Do not make a very tall board. It will be difficult to transport to the fair. It will blow over at the fair. The judges will not be able to read the top part of it. Display and Safety may disqualify it.
- There are sometimes long periods between interviews at the fair, so bring something to keep your mind occupied (or blank). That will keep you out of mischief and prevent you becoming nervous waiting for the next interview.
- Judges will have a general subject knowledge (Biology, Physics, etc.) but are not necessarily
  experts in your project (scientific research is very specialized). Your main goal in a judging
  interview should be to help the judge understand your project. You can usually tell from the
  questions they ask (or don't ask) what level their expertise is, and pitch your responses to
  match.
- Don't talk, talk, talk all the time. Pause to let the judge ask questions.
- If a judge has picked up on something they don't like in your project, ask them if they have any suggestions to correct or improve it. They may not give you more points but, by throwing it back to them, you've created a conversation and have defused the situation.
- Judges at a science fair are typically volunteers; they are not paid to be there. They've given up their time to come talk to you about your project. Say thanks at the end of the interview!
- Don't be afraid to contact an official or a judge at the fair if there is something that's bothering you. Science fairs are usually very busy events and the adults may not notice your difficulty.
- Ultimately, judging is a personal opinion, so you should not expect to win every year. The key is to keep entering every year as good work always gets rewarded at some point.