March, 2007

Dear Science Fair Judge:

Thank you for agreeing to be a judge at the 2007 Beal Bank Dallas Regional Science & Engineering Fair. All judging will take place at the Automobile Building in Fair Park on Saturday, March 24, 2007 (see enclosed map). We are excited to announce that there are around 800 projects entered in this year’s Fair and your participation will ensure the ultimate success of the event. If you know of other qualified judges who would like to participate, please ask them to register online at www.DallasScienceFair.com or call us immediately at (214) 768-2495.

To all veteran judges – welcome back! To all newcomers – we know that you will be inspired by the effort put forth by our exhibitors. Remember that each has already excelled at their school and/or district levels.

Captains - Special instructions and other materials for Captains will be sent in a separate mailing.

Judging Schedule for Saturday, March 24, 2007
Automobile Building, Fair Park

7:30 a.m.  Judge Registration/Check-in. A light breakfast is provided.
8:00 a.m.  Judging Orientation.
9 a.m. – Noon*  Round One of Judging
              Round One Interviews with exhibiting students.
Noon       Students are dismissed from the Automobile Building.
12:30 p.m. All Round One judging results must be completed and turned in by 12:30 p.m.
Lunch     Judges may enjoy a complimentary lunch only after completing Round One judging, turning in the results, and (for Captains) before going on to Round Two.
1:00 – 2:30 p.m.*  Round Two of Judging
                    Round Two judging (for Captains and any other Round One judges who wish to participate). All judges (except Grand Prize Judges) are permitted to leave after completion of Round Two.
3:15 p.m.  Grand Prize Judges’ Orientation.
4:00 p.m.  Final Round of Judging
            Grand Prize Judging begins.

* The schedule for Round One and Round Two are approximate and may vary.
Judging Format

Because of the large number of projects and the need to do a thorough and fair evaluation, the judging process is broken down into several components. The projects are divided up among judging teams to ensure enough time to review every project and interview every student at least once.

• Round One of Judging
First, all exhibitors will be interviewed. Each judge will be part of a three-member team. Each individual judge will be responsible for interviewing 10-12 students during an initial two-hour period. He/She will interview students, record comments and scores and rank the projects in numerical order: 1 for the best project, 2 for second best, etc. (ranking forms will be provided). Round One judging focuses on a group of projects within a particular science. The Round One judges are essentially narrowing the field down to the top projects. The results are passed on to Round Two judges.

• Round Two of Judging
Round Two judges determine the Fair winners in an entire science. During Round Two, judges will select the First-, Second-, and Third-place winners, by science, and up to six Honorable Mentions. We encourage you to give out six honorable mentions whenever possible. The more students we are able to reward, the better. Enclosed in this packet is an explanation of the criteria which should be used to evaluate all projects. Please familiarize yourself with these criteria prior to the Regional Fair.

• Final Round of Judging
Grand Prize winners will be selected by a new team of Grand Prize (Final Round) Judges. First and Second Round judges will not be involved in this phase.

Please familiarize yourself with the enclosed judging reminders and criteria before the fair; more complete instructions will be provided March 24 during the orientation.

Dress Code

Please wear appropriate business attire and comfortable shoes.

Parking

There is free parking available (see enclosed map). The most convenient parking will be immediately adjacent to the Music Hall. You can get there through First (gate # 4) or Grand Avenue (gate # 5) entrances to Fair Park. Handicap parking is available immediately outside the South (main) entrance to the Automobile Building and in front of the main entrance to the Music Hall.
A Judge Captain will contact you by telephone to give you an extra reminder. Your participation is essential to the success of The Beal Bank Dallas Regional Science and Engineering Fair. Please call us if you have any questions or if you will be unable to judge. Our phone number is (214) 768-2495.

We very much look forward to seeing you on Saturday, March 24, 2007!

Sincerely,

Fred Olness     Randall Scalise     Simon Dalley
Fair Director     Fair Director     Fair Director
Southern Methodist University     Southern Methodist University     Southern Methodist University
Important Judging Reminders

Judges should bring their own clipboards and pocket calculator.

1. Only projects with green dots are eligible to win prizes. If you see a red dot, the project has been disqualified due to a violation of the Rules and Guidelines. We hope you don’t encounter any of these but if you do, please interview the student so that he/she can have a beneficial learning experience, but do NOT award the project any prizes.

2. Judges are asked to evaluate the quality of a project based on originality and on how well a student understands the project and the subject matter in which they are working.

3. Interviews are an essential component of the judging process. Only through extensive questioning can a judge obtain a good grasp of what the student has done and what he/she knows. The physical display is a secondary consideration. Students not present for interview can not win a 1st, 2nd, or 3rd place Fair Award; they can, however, receive Honorable Mentions and Special Awards.

4. Keep in mind that these are junior high and high school students and not Ph.D. candidates or professionals. Compare their projects to others at the Fair and not to those executed elsewhere, under different circumstances.

5. Judges are encouraged to talk with students as much as possible, but please be aware of time restraints and please be considerate of other judges.

6. Try to ask only questions that are necessary for the purpose of evaluating the project.

7. No student should be passed over, regardless of what you think of their project. Judging is an educational process as well as a selection process, so it is important to give all students as much time as possible. Most students will appreciate your encouragement and suggestions on how to improve their research. Please continue your interview even if you doubt the project will qualify for an award. Many students really enjoy talking to the judges and say it is the high point of their experience at the Fair.

8. As a general rule, judges should never diminish the significance of any project. Always give credit to the student for having expended the effort to present and prepare a project which was sufficiently better than others within their schools and districts.

9. We have tried very hard to assign you to one of the categories you requested, but please be aware that you may be shifted to a category where there is a critical need. We appreciate your flexibility and cooperation.

10. We will provide #2 pencils for you to use on your forms. You might want to bring a pen and paper for your own comments and notes.
PARKING

Enter from South side of building
AUTOMOBILE BUILDING

SCIENCE FAIR HERE!

SCIENCE PLACE

GRAND AV.

MARTIN LUTHER KING

ROBERT CULLUM BLVD

NORTH

and Engineering Fair
BealBank

Dallas Regional Science
CRITERIA FOR JUDGING

Please read and review the criteria outlined below prior to your orientation on Saturday. During orientation, we will go over this information in greater detail and answer any questions you might have. Please note that Team projects (those done by two or more students) are evaluated differently from individual projects.

Creative Ability Individual: 30 points; Team: 25 points

<table>
<thead>
<tr>
<th>Idea for Project</th>
<th>Methodology/Approach</th>
<th>Analysis and Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit for creative ability should be based on what the student has contributed and not for what others have done for him/her. For example, did the student get the idea for the project in a textbook or from a teacher, or did they develop the idea on their own?</td>
<td>A student may have a very interesting approach to solving a problem, but it may have come out of suggestions made by a teacher or another scientist or engineer. A less sophisticated approach that originates from the student is more creative and deserves a higher score.</td>
<td>Does the project show creative ability and originality in the analysis and interpretation of the data?</td>
</tr>
</tbody>
</table>

Scientific Thought Individual: 30 points; Team: 25 points

<table>
<thead>
<tr>
<th>Problem Identification</th>
<th>Procedural Plan</th>
<th>Assessment of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the problem stated clearly and unambiguously? Was the problem sufficiently limited so that it was possible to handle? Simply working on a difficult problem without getting anywhere does not make much of a contribution. On the other hand, neither does solving a very simple problem.</td>
<td>Was there a procedural plan for obtaining a solution?</td>
<td>Is there adequate data to support the conclusions? Are the limitations of the data recognized and understood?</td>
</tr>
<tr>
<td>Defined Variables</td>
<td>Assessment of Data</td>
<td>More Research Indicated</td>
</tr>
<tr>
<td>Are the variables clearly recognized and defined? If controls were necessary, was there a clear recognition of the need for them and were they correctly used?</td>
<td>Does the student understand how the project ties in with related research?</td>
<td>Does the student have an idea of what further research is indicated?</td>
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</tbody>
</table>

Note: Do not let expensive equipment or fancy displays sway your decision. Collections are creative only if they are used to support an investigation and serve a purpose. It should be pointed out again that the student may have received assistance, and that it is important to estimate the extent of this assistance and what contribution it made to the project.

Skill Individual: 15 points; Team: 12 points

<table>
<thead>
<tr>
<th>Knowledge of Resources</th>
<th>Appropriate Use of Materials</th>
<th>Self-Managed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the student have the skills required to do all the work necessary to obtain the data which supports the project? Laboratory skills? Computation skills? Observational skills? Design skills?</td>
<td>Consider workmanship and durability. Where did the equipment come from? Was it built independently by the student?</td>
<td>Was the project carried out under the supervision of an adult or did the student work largely on his/her own?</td>
</tr>
</tbody>
</table>
**Thoroughness** Individual: 15 points; Team: 12 points

<table>
<thead>
<tr>
<th>Adequate Data</th>
<th>Solved Stated Problem</th>
<th>Conclusion from Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there enough data or no data at all?</td>
<td>Does the project carry out its purpose to completion within the scope of its original aims?</td>
<td>How completely has the hypothesis been supported? Does the data support the conclusion? Are all loose ends tied up?</td>
</tr>
</tbody>
</table>

**Relationship to Other Approaches**
Is the student aware of other approaches or theories concerning the project?

**Lab Notebook**
How complete was the lab notebook? Were the notes recorded on a timely basis?

**Clarity** Individual & Team: 10 points

<table>
<thead>
<tr>
<th>Display</th>
<th>Clarity of Discussion</th>
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</thead>
<tbody>
<tr>
<td>How well does the project display explain itself? Is the data presented clearly? Are the results presented clearly? Can you understand the information presented?</td>
<td>How clearly is the student able to discuss the project? Can he/she explain its purpose, procedure and conclusions in a clear and concise manner?</td>
</tr>
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</table>

**Note:** Try to make allowances for student nervousness that may result from conversing with an authority. Watch out for memorized speeches with little actual understanding of principles.

**Teamwork** Team projects only: 16 points

| Are the tasks and contributions of each team member clearly outlined? | Was each team member fully involved with the project, and is each member familiar with all aspects? | Does the final work reflect the coordinated efforts of all team members? |