

*The Charles Duggan*

# Long Island Science and Engineering Fair



# LISEF

## Judging Guide

A Regional Affiliate of  
**Society for Science and the Public's**  
**International Science and Engineering Fair**

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# Judging Guidelines

The core of judging at LISEF is the interaction between judge and Finalist in the interview. Judges must strive to make the Finalist(s) comfortable so that they can demonstrate and share their knowledge and present their project to the best of their ability.

In preparation for this important duty, judges are strongly encouraged to preview project abstracts in their judging preliminary category in advance of the Day I competition; you may access these on our website by re-entering the Judges' Registration portal using your user name and password that you provide during registration. Judges will receive an individualized interview schedule on the day of the competition after the Welcome and Orientation Session. Samples of the Judging Criteria Score Sheets are attached at the end of this document.

Considerable emphasis is placed on two areas: *Creativity* and *Presentation*.

## Creativity:

A creative project demonstrates imagination and inventiveness. Such projects often offer different perspectives that open up new possibilities or new alternatives. Judges should place emphasis on research outcomes in evaluating creativity.

## Presentation/Interview:

The interview provides the opportunity to interact with the finalists and evaluate their understanding of the project's basic science, interpretation and limitations of the results and conclusions.

- If the project was done at a research or industrial facility, the judge should determine the degree of independence of the finalist in conducting the project, which is documented on Form 1C. If you become aware that this project was done at such a facility, before you conclude your interview, you should examine this form which must be on display when projects are done at a research or industrial site.
- If the project was completed at home or in a school laboratory, the judge should determine if the finalist received any mentoring or professional guidance.
- If the project is a multi-year effort, the interview should focus ONLY on the current year's work. Multi-year projects require that a Form 7 be displayed; this form should clearly explain the differences in this year's research and what was done in previous years. Judges should review the Form 7 and the previous year's Abstract to clarify what progress was completed this year.
- Please note that both team and individual projects are judged together, and projects should be judged only on the basis of their quality. However, all team members should demonstrate significant contributions to and an understanding of the project.

You are encouraged to:

- Take control of the interview and do not allow the Finalist to monopolize the interview with a canned speech.
- Get to the heart of what the Finalist(s) has/have done and whether their work is worthy of an award relative to the other projects in the category ("Reward the best.")

## "... Encourage the Rest"

LISEF is not only a competition, but also an educational and motivational experience for all participants. The fact that students have spent time researching a scientific question is a great thing, even though not all of the research outcomes are outstanding. Students will continue to explore scientific ideas with excitement if you can provide a word of encouragement!

## Confidentiality is critical

Confidentiality about judging discussions and decisions is critical. Please do not discuss judging in public places or with others not directly involved in the judging process prior to the results being announced at the award ceremonies.

# Judge's Scoring Guidelines and Worksheet

Finalist Name(s): \_\_\_\_\_ Table Number: \_\_\_\_\_

Following is a set of criteria that can assist you in interviewing the students and in your evaluation of their projects.

Guidelines	Notes	Points Available	Points Awarded
<b>I. Research Question</b> <ul style="list-style-type: none"> <li>▪ Clear and focused purpose</li> <li>▪ Identifies contribution to field of study</li> <li>▪ Testable using scientific methods</li> </ul>		10	
<b>II. Design and Methodology</b> <ul style="list-style-type: none"> <li>▪ Well designed plan and data collection methods</li> <li>▪ Variables and controls defined, appropriate and complete</li> </ul>		15	
<b>III. Execution:</b> <b>Data Collection, Analysis and Interpretation</b> <ul style="list-style-type: none"> <li>▪ Systematic data collection and analysis</li> <li>▪ Reproducibility of results</li> <li>▪ Appropriate application of mathematical and statistical methods</li> <li>▪ Sufficient data collected to support interpretation and conclusions</li> </ul>		20	
<b>IV. Creativity</b> <ul style="list-style-type: none"> <li>▪ Project demonstrates significant creativity in one or more of the above criteria</li> </ul>		20	
<b>V. Presentation: Poster</b> <ul style="list-style-type: none"> <li>▪ Logical organization of material</li> <li>▪ Clarity of graphics and legends</li> <li>▪ Supporting documentation displayed</li> </ul>		10	
<b>VI. Presentation: Interview</b> <ul style="list-style-type: none"> <li>▪ Clear, concise, thoughtful responses to questions</li> <li>▪ Understanding of basic science relevant to project</li> <li>▪ Understanding interpretation and limitations of results and conclusions</li> <li>▪ Degree of independence in conducting project</li> <li>▪ Recognition of potential impact in science, society and/or economics</li> <li>▪ Quality of ideas for further research</li> <li>▪ For team projects, contributions to and understanding of project by all members</li> </ul>		25	
<b>TOTAL</b>		100	

**“Pick the best...Encourage the rest”**

**PLEASE KEEP THIS SHEET WITH YOU UNTIL THE JUDGING PROCESS HAS BEEN COMPLETED!**

*RETURN IT, ALONG WITH ALL REMAINING PAPERWORK, TO THE SCORING CENTER IN THE JUDGES' ROOM.*