



NEIRSEF Notes

Northeast Indiana Regional Science and Engineering Fair • November 2005

A Message from the Director

No sooner had Hurricane Katrina bombarded the coast when science and engineering concerns were being discussed on the news. Even the youngest, most eager researcher can be motivated to look at their world, ask questions and embark on a fair project influenced by a real event like Hurricane Katrina. The ultimate success occurs when students recognize the relevance of their research beyond the classroom. You, the teacher, are the key to making this happen and for that reason; the NEIRSEF Committee admires and appreciates each teacher for their work with fair projects.

As we embark on the 51st NE Indiana Regional Science and Engineering Fair, our goal is to provide a positive experience for you and your students. Recently, we undertook an evaluation of Fair procedures and sought feedback through teacher surveys, a focus group, and interviews with Indiana regional fair directors. You can be proud to participate in a highly credible fair that promotes and rewards the highest standards in ethical and safe student research. The often lamented paperwork is designed to ensure that procedures are followed and learned by students. We understand that learning ISEF guidelines involves valuable time and effort. To assist you in this endeavor, a number of support efforts have been undertaken.

First, Kim Wagner, Fair Program Assistant and Educator Liaison, re-designed the Fair website to create a "teacher-friendly" format. Please check it out: www.ipfw.edu/scifair Kim is also available as a resource to assist with answering paperwork questions.

Second, a number of handy summary tables/guides have been designed to assist you as fair coordinator or teacher sponsor. These are enclosed in this Teacher's Packet.

Third, the Fair Steering Committee approved a new option allowing a school or school system to establish a Local Scientific Review Committee (SRC) for pre-review of junior level projects only. Please see the box to the right for details about this new option.

On behalf of the NEIRSEF, we hope you find these new aids helpful and we wish you all the best in pursuing your fair programs. Please contact Kim Wagner, Trent Parker (SRC Chair) or me any time for concerns or questions regarding the Fair.

Sincerely,
Carol Dostal
NEIRSEF Director

NEW OPTION: Coordinating a Local Scientific Review Committee for Project Pre-Review

This year, the NEIRSEF Steering Committee approved a new option which allows a school or school system to establish a Local Scientific Review Committee for pre-review of junior division projects only.

Choosing this option requires a school to take more responsibility in the pre-review process for projects with potential safety/ethical considerations. However, choosing this option also enables a school to create its own junior pre-review deadlines and allows junior division paperwork submission to the Local SRC rather than the Regional SRC for pre-review. The local SRC CAN NOT pre-review senior level participants. Those projects must still be sent to the regional SRC.

When choosing this option, the fair coordinator and principal must sign a contract and provide the regional fair with a list of the local SRC members. The local SRC committee should be established by the end of this year (December 2005). The ISEF requirements for a Scientific Review Committee are:

- ◆ A SRC must consist of a minimum of 3 persons and must include:
 - ◆ A biomedical scientist (Ph.D., M.D., D.V.M, D.D.S., or D.O.)
 - ◆ A science teacher
 - ◆ At least one other member

Further requirements are listed in the ISEF Rule Book or on the Local Scientific Review Committee Contract. If the local SRC has questions, they are encouraged to contact the Regional SRC Chairperson.

The post-review process will remain the same. All junior and senior level students advancing to the Regional Fair must still submit their paperwork to the regional SRC two weeks before the fair for post-experimentation review (see deadlines on back page).

Schools interested in exploring the option of coordinating a Local SRC can contact Kim Wagner for a summary of responsibilities.

Eligibility Procedure

Step 1: Educators must affiliate with the fair by filling out the on-line Educator Affiliation Form.

It is located at: www.ipfw.edu/scifair/teacher/forms/affiliationform.htm

By filling out this form, you will be entered into our database and will receive updated information as it is sent out.

Step 2: Students (in grades 6-12 only) will need to fill out the on-line Pre-Review Questionnaire

(see questions at right) to determine which eligibility route they will take. That form is located at:

www.ipfw.edu/scifair/student/forms/prereviewquestionnaire.htm

Step 3A: After filling out the Pre-Review Questionnaire and submitting it, students are then asked to either fill out the Exemption Form or the Pre-Review Cover Sheet. *If your students answer "NO" to all the questions on the questionnaire, they fill out the Pre-Review Exemption Form:*

www.ipfw.edu/scifair/student/forms/prereviewexemptionform.htm

Print it FIRST, then submit via the web. The printed copy is then mailed to Kim Wagner, NEIRSEF Educator Liaison, so that original signatures are on file.

Step 3B: If you answer "YES" to any one of the questions, the projects must undergo pre-review. The students will then fill out the Pre-Review Cover Sheet:

www.ipfw.edu/scifair/student/forms/prereviewcoversheet.htm

Print this form FIRST, then submit via the web. The printed copy is then mailed to Kim Wagner along with the required ISEF project forms. (Copies of the ISEF Rule Book are available on-line at www.sciserv.org/isef/)

DO NOT START YOUR PROJECT UNTIL IT HAS BEEN REVIEWED AND RETURNED TO YOU!

Mailing Address:

Kimberly Wagner, NEIRSEF Educator Liaison

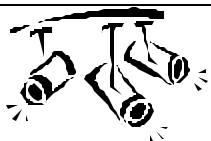
IPFW — ET 243

2101 East Coliseum Blvd.

Fort Wayne, IN 46805

Phone: (260) 481-5756

Email: wagnerk@ipfw.edu



CHECK IT OUT! New Fair Website

Over the summer, the Regional Science and Engineering Fair website underwent a major redesign aimed at making the site more user-friendly for both teachers and students. Resources were updated, pictures were added, and the site was set up according to grade divisions. Please visit the fair website for the most up-to-date information about fair procedures and deadlines.

Northeast Indiana Regional
Science and Engineering Fair
www.ipfw.edu/scifair

Intel International
Science and Engineering Fair
www.sciserv.org/isef

Hoosier State Science and Engineering Fair
www.sefi.org

Teacher Checklist

If you are advising students who are participating in an Intel ISEF affiliated science and engineering fair, use this checklist as a guide!

1. Prepare a checklist and timeline with dates for the students.
2. Encourage students to select a topic for their research project and direct them to sources.
3. Approve projects and direct students to develop a research plan.
4. Review judging expectations with your students. Let them know how their projects will be evaluated.
5. If possible, schedule time with your school's fair coordinator for students to work on their project boards after school. Recruit parent volunteers to help at after school sessions.
6. Hold a classroom fair to help students practice their project presentations and to polish and edit their project.
7. Compete at the regional fair and celebrate your students' accomplishments!

SRC Pre-Experimentation Review 2005-2006 Required Forms	1 - Checklist for Adult Sponsor / Safety Assessment	1A - Research Plan	Research Plan Attachment	1B - Approval Form	1C - Regulated Research Institution Form	2 - Qualified Scientist Form	3 - Designated Supervisor Form	4 - Human Subjects Form	5A - Vertebrate Animal Form	5B - Vertebrate Animal Form	6A - Potentially Hazardous Biological Agents Form	6B - Human and Vertebrate Animal Tissue Form	Form 7 - Continuation Projects Form
Human Subjects	X	X	X	X	X*	X*	X*	X					
Vertebrate Animals (non-regulated site) **	X	X	X	X		X*	X*		X				
Vertebrate Animals (regulated research institution)	X	X	X	X	X	X	X*			X			
Human and Vertebrate Animal Tissue	X	X	X	X	X*	X*	X*				X	X	
Potentially Hazardous Biological Agents	X	X	X	X	X*	X*	X*				X		
Controlled Substances **	X	X	X	X	X*	X*	X*						
Hazardous Substances or Devices	X	X	X	X	X*		X						
Continuing Project	X	X	X	X	X*								X
* - if applicable to research project (see ISEF Rule Book for further details) ** - for projects involving controlled substances or vertebrate animals in a non-regulated research institution, you may be required to have both a designated supervisor and a qualified scientist (see ISEF Rule Book for further details)													

Common Paperwork Problems

- ◆ Required forms are missing or incomplete.
Use the ISEF Rules Wizard or the SRC Pre-Experimentation Review Required Form chart below to determine which forms are required for a student's project. At minimum, Forms 1, 1A, 1B and the Research Plan Attachment are required. ALL portions of the form must be completed. Missing signatures, blank sections, and other missing information causes delays in approval.
- ◆ Incorrect date information on Research Plan Form (1A).
The Research Plan has spaces for "Projected Start/End Date" and "Actual Start/End Date." The Actual Start and End Dates should not filled in for the pre-experimentation review and should not be before the project is approved.
- ◆ Research Plan Attachment lacks sufficient information about the method and bibliography is missing.
Students need to give enough information on the Research Plan Attachment so the SRC can understand exactly what the student is going to do and how they are going to do it. The SRC will not guess so it is better to give more detail than less! Also, students need to list the resources they used when determining what to study. This way, the SRC can tell if the student is using credible resources when planning the experiment.
- ◆ Qualified Scientist Form (2) and Designated Supervisor Form (3) are switched.
It is always a good idea for a student to have a Designated Supervisor, even the project does not require one by ISEF rules. Any adult can serve as a Designated Supervisor; however, ISEF has very stringent definitions of who can serve as a Qualified Scientist. Typically, a Qualified Scientist must hold a doctoral degree in the field of study under which the student's project falls (see page 10 of the 2005-2006 ISEF Rule Book for details).
- ◆ Inappropriate work site noted on Research Plan Form (1A).
ISEF strictly prohibits students from working with potentially hazardous biological agents in their homes. Such projects must be conducted in an appropriate work space as defined by ISEF (see page
- ◆ Human Subjects Form (4) used inappropriately.
When a student is using human subjects, the student must have their project pre-reviewed by the SRC BEFORE starting any part of the experiment. Once all the required SRC signatures are on the Human Subjects Form (4), the students must then copy the form and have all the subjects involved in the experiment sign and date it.

MARK YOUR CALENDARS

5 p.m., Friday, December 30, 2005: Deadline to submit local SRC contract to Regional Fair Committee.

5 p.m., Friday, January 27, 2006: Deadline to submit 6th–12th grade students' projects for the Pre-Experimentation Review by the NEIRSEF SRC. (*Deadline applies to projects that are being submitted for first or subsequent reviews.*)

5 p.m., Friday, February 17: Deadline to submit SRC Pre-Experimentation Review Exemption Form for 6th–12th grade students' projects that DO NOT require pre-experimentation review. Form is completed on-line, and the hard copy printed, signed, and sent to Fair Liaison.

5 p.m., Friday, March 3, 2006: Junior and Senior Division (6–12) Registration Deadline for regional fair. (Registration must be completed on-line by students' teachers and the \$10 entry fee received by 5 p.m.)

LATE REGISTRATIONS WILL NOT BE ACCEPTED.

Project paperwork and completed project abstract for junior and senior division (6–12) students coming to the regional fair must be received for Final SRC review.

5 p.m., Friday, March 10, 2006: Elementary Division (K–5) Registration deadline for regional fair. (Registration must be completed on-line by students' teachers and the \$10 entry fee received by 5 p.m.)

LATE REGISTRATIONS WILL NOT BE ACCEPTED.

Saturday, March 18, 2006: 51st Annual Northeast Indiana Regional Science and Engineering Fair, Gates Sports Center, IPFW campus.

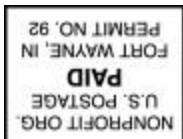
NEIRSEF Contact Information

Carol Dostal, NEIRSEF Director
School of Engineering, Technology and Computer Science
IPFW, ET 243
2101 East Coliseum Boulevard
Fort Wayne, IN 46805
Phone: (260) 481-6905
Email: dostalc@ipfw.edu

Kimberly Wagner, NEIRSEF Educator Liaison
School of Engineering, Technology and Computer Science
IPFW, ET 243
2101 East Coliseum Boulevard
Fort Wayne, IN 46805
Phone: (260) 481-5756
Email: wagnerk@ipfw.edu

Dr. Trent Parker, SRC Chair
Department of Human Services
IPFW Neff 120
2101 East Coliseum Boulevard
Fort Wayne, IN 46805
Phone: (260) 481-5456
Email: parkert@ipfw.edu

www.ipfw.edu/scifair



Northeast Indiana Regional Science and Engineering Fair
Indiana University Purdue Fort Wayne
2101 East Coliseum Boulevard
Fort Wayne, IN 46805

