



Dear Principals, Teachers, and Local Fair Directors,

Thank you for your dedication to the 2018 Northern Indiana Regional Science and Engineering Fair (NIRSEF). We are looking forward to another exciting year for exhibitors and NIRSEF contributors on Saturday, March 3, 2018. Please visit the NIRSEF website at <http://sciencefair.nd.edu> for all relevant information, links and forms. This letter only serves as an overview.

### 2018 NIRSEF CALENDAR

<b>Friday, February 16, 2018</b>	5:00 p.m.	All Project Information Must be Finalized
<b>Friday, March 2, 2018</b>	5:00 p.m. to 7:00 p.m.	Open for Project Set-up Alternative Judging
<b>Saturday, March 3, 2018</b>	7:45 a.m. to 9:00 a.m.	Open for Project Set-up
	9:00 a.m. to 12:30 p.m.	Project Judging (Exhibitors Only)
	12:30 p.m. to 1:30 p.m.	Lunch (Exhibitors Only)
	1:30 p.m. to 3:00 p.m.	Display Projects - OPEN TO PUBLIC
	3:00 p.m. to 4:00 p.m.	Awards Presentation
	4:00 p.m. to 4:30 p.m.	Remove Projects

Very best to you and your Exhibitors,

Micha Kilburn, Ph.D.  
Executive Director

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**GENERAL INFORMATION**

**March 2 – March 3, 2018 - STEPAN CENTER AT THE UNIVERSITY OF NOTRE DAME**

1. The Northern Indiana Regional Science and Engineering Fair divides project levels according to:  
Elementary = Grades 3 – 5                      Junior = Grades 6 – 8                      Senior = Grades 9 – 12
2. The Hoosier Science and Engineering Fair (HSEF) will allow up to 10 Elementary or Junior Projects to 10 Senior Projects from each region – regardless if these are individual or team projects. For 2018, the HSEF will be held at the IUPUI campus in Indianapolis, IN on Saturday, March 31.
3. The Intel International Science and Engineering Fair (ISEF) is for Senior level projects only. This will be held from May 13-18, 2018 in Pittsburg, PA. Intel ISEF winners from Indiana have all costs and fees supported by the Science Education Foundation of Indiana to attend.
4. While teams (of up to 3 students) may compete at the NIRSEF, HSEF and ISEF, team projects will be exhibited and evaluated alongside individual projects. This has little impact on the NIRSEF but does impact the HSEF and ISEF.
5. Any schools or teachers new to the NIRSEF – email [sciencefair@nd.edu](mailto:sciencefair@nd.edu) with questions.

**ENTRY FEES**

- The entry fee for the Northern Indiana Science and Engineering Fair is **\$10.00 per student**.
- Funds generated from entry fees will be used for NIRSEF facilities and equipment rental, ribbons, certificates, awards, insurance, and general supply costs.
- Individual entry fees are payable online via the NIRSEF website or by cash or check on the day of the NIRSEF. Schools that will be paying entry fees for multiple students may send a check to Micha Kilburn 225 Nieuwland Science Hall, Notre Dame, IN 46556 or pay by electronic check online. Please do not have individual students send checks or cash via mail.

**JUDGING**

Judging Criteria	Weight
Creative Ability	30 Points
Scientific thought/engineering goals	<b>30 Points</b>
Thoroughness	15 Points
Skill	<b>15 Points</b>
Clarity	10 Points
Teamwork is also taken into account for groups	

## **EXHIBITOR INFORMATION FOR LOCAL FAIR DIRECTORS**

1. Read the relevant page for your division on our website <http://sciencefair.nd.edu>
  - a. For specific questions see the entire rulebook INTEL International Science and Engineering Fair Rules and Guidelines
2. Projects on any scientific or engineering subject made by students may be entered if students are enrolled in any class from **grade 3** through **grade 12** in any public, private, parochial or home school in St. Joseph, Elkhart, Marshall and Fulton Counties.
3. An exhibit may be entered through a school or group, and a student may enter only one exhibit (regardless if it's an individual or team project entry).
4. All exhibits will be judged for appropriate awards according to level and division.
5. Teachers, family members and sponsors may only advise.
6. An exhibit must not be an identical repetition of one shown by the same exhibitor at a fair of a previous year.
7. Exhibits must be confined to a table or floor space 24 inches front to back for elementary and 30 inches front to back for junior and senior. Maximum floor to top height is 9 feet (108 inches; table height is 40 inches from the floor). Side-to-side measurements for elementary and junior projects will be 36 inches, and for senior projects will be 48 inches (as required by ISEF). **Proper attention to exhibit safety is expected of all fair participants.**
8. Please refer to the **display guidelines** on the NIRSEF website. We recommend that scientific equipment that is fragile or expensive NOT be displayed with the projects unless they are absolutely necessary to the display's presentation. The Fair is not responsible for theft, damage or breakage to any equipment.
9. Experiments on vertebrate animals, pathogenic agents, tissues and hazardous chemicals/devices must conform to regulations for experiments set forth by the International Science and Engineering Fair. **We discourage the use of live animals in experimentation in accordance with ISEF guidelines.** It is imperative that ANY PROJECTS investigating *vertebrate animals, pathogenic agents, tissues and hazardous chemicals or devices* be reviewed by our Scientific Review Committee (SRC) PRIOR TO EXPERIMENTATION.
10. Experiments on human subjects should be evaluated PRIOR TO EXPERIMENTATION by a local school Institutional Review Board (IRB). Guidelines on setting up an IRB and directives for how an IRB should operate can be found on the NIRSEF website.
11. Construction of project displays must be durable; movable parts firmly attached and safe. If electricity is used in the exhibit, all switches and cords for 110-volt operation must be of approved UL variety. **Each house current-operated exhibit must be provided with six or more feet of cord and the popular style of parallel plug (grounded plugs preferred).**

12. Exhibitors may set up their exhibits at the Stepan Center on the campus of the University of Notre Dame on **Friday, March 2, 2018**, between **5:00 p.m.** and **7:00 p.m.** or on **Saturday, March 3, 2018** between **7:45 a.m.** and **9:00 a.m.** Exhibits must be removed on March 3 following the Awards Presentation, but not earlier.
13. Individual *and* team projects may be entered at all grade levels, and all Regional Fair exhibitors earning category awards will receive ribbons. A team project is one that has been developed by two or three students at the elementary (grades 3-5), junior (grades 6-8) or senior (grades 9-12) level and will require only one space for display. **All students - individual entrants and those in team projects - must pay an entry fee per person.** Please note that entry fees for team projects are per **individual** and **not** per project, and fees are \$10 per person.
14. Judges will evaluate exhibits on March 3, 2018, between 9:00 a.m. and 12:30 p.m. **Only judges, the fair committee (including fair volunteers) and exhibitors will be permitted in exhibit area during the judging. Exhibitors must be present during the judging. Please communicate this information to all parents.** Scoring will be on work done by exhibitors, not on value of accessory equipment either borrowed or purchased. Criteria for judgment will be based on creative ability, scientific thought, thoroughness, skill, clarity and communicative value. If they desire to do so, judges may interview some or all exhibitors. Decision of the judges will be final.
  - a. An Alternative Judging Session is available Friday, March 2 from 5-7pm for students who can not attend Saturday for religious reasons.
15. The number of students that may represent your school in the 2018 NIRSEF will be:
  - a. Elementary: 2 project spaces per grade  
Junior: 2 project spaces per grade  
All high schools: 10 guaranteed and unlimited project spaces **with approval from NIRSEF Committee**

If you wish to request additional space, please email [sciencefair@nd.edu](mailto:sciencefair@nd.edu). How students are selected to represent a school is entirely up to the school. Students may be selected on a basis of a school science fair; however, it is not necessary for a school to have a science fair in order to select its representatives to the Regional Fair. **The selection may be done however your school decides, but all project information must be entered into the Online Project Registration System by 5:00 p.m. Friday, February 16, 2018.**
16. After the online project entry has been completed, the Availability to Participate and Method of Payment must be completed via the Student Registration Instructions on the NIRSEF website (<http://sciencefair.nd.edu>).
17. **Exhibitors must bring their signed Participation Waiver with them to the NIRSEF registration table.**

## **PROJECT INFORMATION FOR EXHIBITORS AND FAMILIES**

(For additional information, refer to the NIRSEF website at: <http://sciencefair.nd.edu>)

1. Exhibits must be confined to a table or floor space 30 inches front to back. Maximum floor to top height is 9 feet (108 inches; table height is 40 inches from the floor). Side-to-side measurements for elementary and junior projects will be 36 inches, and for senior projects will be 48 inches (as required by ISEF).
2. Please refer to the list on the NIRSEF website of items that are not allowed to be displayed. We recommend that scientific equipment that is fragile or expensive NOT be displayed with the projects unless they are absolutely necessary to the display's presentation. The Fair is not responsible for theft, damage or breakage to any equipment.
3. Experiments using vertebrate animals, pathogenic agents, tissues and hazardous chemicals or devices must conform to regulations of the International Science and Engineering Fair. ALL projects using these subjects for research must be approved by the NIRSEF SRC committee **PRIOR TO EXPERIMENTATION**. (See your teacher, school fair coordinator or contact the NIRSEF Executive Director for the appropriate forms). In all cases, the use of live vertebrate animals in experimentation has been discouraged in accordance with ISEF (note – think about if you can replace with an invertebrate).
4. Experiments using human subjects must also conform to regulations of the International Science and Engineering Fair. Your school may set up an Institutional Review Board to review these projects **PRIOR TO EXPERIMENTATION**. Please refer to your teacher or school Fair Coordinator.
5. PARENTS PLEASE NOTE: *only* judges, the fair committee, pre-registered volunteers, and exhibitors will be permitted in the exhibit area during judging and lunch (9:00 am to 1:30 pm). Exhibitors must be present during judging, as project judging includes exhibitor interviews. The judging rubric is below. **The decision of the judges will be final.**
6. **The Regional Fair Committee and the University of Notre Dame are not responsible for any bodily injury or property damage loss to any person or exhibitor.**
7. Students must be sponsored by a school or organization to participate in the NIRSEF. Fair Coordinators are responsible to assure that project information for each student has been entered in the Online Project Registration database. Please check with your Fair Coordinator to complete this process.
8. Team projects may be entered by up to **three** students at all grade levels. Team projects and individual projects are all judged in the same category.
9. Please email [sciencefair@nd.edu](mailto:sciencefair@nd.edu) if you have any questions.