

THE NJRSF AND ITS PURPOSE

The North Jersey Regional Science Fair (NJRSF) is a non-profit organization that holds an exhibition of student science projects for grades 9-12, and is affiliated with the Intel International Science and Engineering Fair (ISEF) to be held May 8-14, 2005, in Phoenix, Arizona. Students exhibit their work in competition for a wide variety of prizes. New Jersey counties covered by the NJRSF are: Bergen, Essex, Hunterdon, Middlesex, Morris, Passaic, Somerset, Sussex, Union, and Warren.

The fair seeks to motivate and reward students who engage in creative scientific activity. It also provides, as part of the judging process, an opportunity for students to discuss their work with scientists and engineers from academia and industry. Finally, it is our goal to support and encourage students who may be considering careers in science and technology.

ISEF OPPORTUNITIES

You could win a trip to the Intel International Science and Engineering Fair which offers many awards and prizes including:

- Over \$1 million in college scholarships
- Category awards ranging from \$500 (4th place) to \$8000 (Best in Category).
- International trips and research opportunities
- Special awards for students and schools

SHOULD YOU ENTER?

You don't have to be a child prodigy or an Einstein to undertake a science project and enter the NJRSF. Good projects come from the desire to learn more about something that is of interest to you. It is the spirit of scientific research to answer some question or demonstrate the feasibility of an idea. Projects should be investigative in nature, attempting to answer a question or address a problem, either experimentally or theoretically.

NJRSF PRIZES

Grand prize – Four students and their advisors will receive all-expense-paid trips to ISEF for further competition.

- **Two students from grades 9-10**
- **Two students from grades 11-12**

Four nominations to the Partners in Science summer research program administered by the Liberty Science Center.

Two 4-year academic fellowships to NJIT for outstanding junior entrants in engineering, math, or physics.

Two nominations to the NJIT Summer Research Academy, allowing the winners to take up to 6 credits of college courses.

A \$500 cash award sponsored by the New Jersey Water Environment Association for an outstanding project dealing with water quality.

U.S. savings bonds of \$200, \$100, \$75, and \$50 for projects dealing with computer technology. Sponsored by the Association for Computing Machinery.

Over 200 other awards and prizes

NJRSF CATEGORIES

Biochemistry
Botany
Behavioral Science
Chemistry
Computers
Earth and Space Science
Engineering
Environmental Science
Mathematics
Microbiology
Medicine and Health
Physics
Water Pollution
Zoology

ENTRY STEPS

CHOOSE A TOPIC: For help in choosing a topic, visit our website at <http://njrsf.org> and click on the “Students” link. Projects may be done individually or by teams of 2 or 3.

All NJRSF projects must conform to ISEF rules for chemical, electrical, thermal, and mechanical safety. Projects involving human subjects, animals, recombinant DNA, or living tissue, and projects with safety hazards such as high voltages, laser, or radiation, must satisfy special certification requirements. The NJRSF Safety Review Committee (SRC) must approve the research plan **BEFORE** work is begun. All required ISEF forms must be submitted to the SRC with the research plan. Visit www.sciserv.org/isef/index.asp to use the ISEF Rules Wizard to determine which forms you are required to submit or visit our website for contact info.

**CERTIFICATION DEADLINE:
DECEMBER 1, 2004**

REGISTER for the fair. You can register online at <http://njrsf.org> under the “Students” link.

**REGISTRATION DEADLINE:
JANUARY 28, 2005**

You should receive a confirmation by mail within 2 weeks. The confirmation will include list of forms to submit, a signature form, and abstract instructions. All forms must be submitted along with a \$10 entry fee (payable to the “North Jersey Regional Science Fair”) to complete your registration. Forms must be submitted by the deadline; they will not be accepted at the fair. If you not receive a confirmation after 2 weeks, contact the committee immediately to verify your registration.

**FORMS DEADLINE:
FEBRUARY 25, 2005**

Around Feb 25 you will receive final instructions, maps, and a full schedule. If not, please contact the committee at once.

PREPARE your exhibit, abstract, and oral presentation. Note the safety and size requirements in the ISEF rules. Finalists for the ISEF trip awards will participate in the ISEF Symposium, where each finalist will give a 10-minute presentation of their work to the judges, fellow students, and advisors. Students should have viewgraphs prepared for the symposium.

**Come to the fair!
March 4-5, 2005 at
Rutgers University
New Brunswick, New Jersey**

TENTATIVE FAIR SCHEDULE

Friday, March 4, 2005

- Project setup: 3-6 p.m.
- Judging 7-9:30 p.m.

Saturday, March 5, 2005

- Judging: 9 a.m.-noon
- ISEF symposium: 1-4 p.m.
- Awards ceremony: 6:30-8 p.m.
- Exhibits open to public: 1-6 p.m.

NJRSF COMMITTEE

A few key committee members are listed below. For more info, see the “Contact Us” page on our website: njrsf.org.

General Information

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Project Review and Certification

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Stevens Institute of Technology

Contributions are tax-deductible, and may be sent to Ken Lyons. Tax ID Number is available upon request.

LAST YEAR'S TRIP WINNERS

Stephanie Mok

Computer Modeling and Simulation of Smallpox Outbreaks: Assessment of Control and Intervention

- US Air Force, 2nd place, \$1500
- ISEF 3rd place, \$1000

Aakash Shah

The role of Hormesis in the Toxicology of Copper in Rotifers

- US Air Force, 1st place, \$3000
- ISEF 2nd place, \$1500

George Hotz

Mapping Robot

- IEEE Computer Society 3rd place, \$350

Michael Page

2x2 Contingency Tables: Jackknife Analysis of Asymptotic and Exact Tests

- American Statistical Assoc., 1st place, \$1000

