# 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 10-15, 2008, in Reno, Nevada. 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 (4<sup>th</sup> 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. After you register (see next column), 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, 2008

REGISTER for the fair. Students must register online at **http://njrsf.org** under the "Students" link.

#### **REGISTRATION DEADLINE:** February 1, 2009

You will receive a confirmation/coversheet by email. You and your sponsor must sign this form, and mail it with all ISEF forms, as directed, along with your \$10 entry fee (payable to the "North Jersey Regional Science Fair"). Forms will not be accepted at the fair. If you not receive your emailed confirmation, check the website or contact the committee immediately to verify your registration.

#### FORMS DEADLINE: February 28, 2009

Around Mar 13 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 20-21, 2009 at Rutgers University New Brunswick, New Jersey

### **TENTATIVE FAIR SCHEDULE**

Friday, March 20, 2009

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

Saturday, March 21, 2009

- 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.

## **CORPORATE SPONSORS**

AT&T Labs Dunn & Bradstreet GlaxoSmithKline Pharmaceuticals **GPU** Honeywell International Inc. Intel Corp. Johnson & Johnson NCS Technologies NJIT Nabisco Inc. National Starch & Chemical Corp. Novartis Pharmaceuticals PSE&G Paragon Pfizer Inc. Schering-Plough Corp. 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

#### **Kevin Fritz**

Baseball and the Markov Chain Theory

• Taiwan Sci Fair Trip 1<sup>st</sup> place

### **Barnett Koven**

Engineered Anaerobic Digestion Utilizing a Thermophilic Media

- Lemelson Award
- USAF  $2^{nd}$  place
- ISEF 4<sup>th</sup> place

#### Johanna Lee

Levels of sRAGE in AGE-stressed HEPG2 cells

• Endocrine Society HM

## **Akhil Mathew**

Translation-Invariant Binary Representations

• Mu Alpha Theta 1<sup>st</sup> place

### 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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Karen Kranz, Fair Co-Director kskranz@hotmail.com

### **Project Review and Certification**

Matthew Toth, SRC chair mtothnjrsf@comcast.net