



# Greater Capital Region Science and Engineering Fair & Science Congress

March 21, 2009

[http://www.science.rpi.edu/Science\\_Fair/](http://www.science.rpi.edu/Science_Fair/)



The Greater Capital Region Science and Engineering Fair & Science Congress will take place on March 21<sup>st</sup>, 2009 in the Walker Laboratories of Rensselaer Polytechnic Institute. Registration will take place outside of the Sage Auditorium in Sage Hall located next to the Walker Labs. There is a registration fee of \$15 for each participant. What follows is a list of awards that will be provided at our 2009 Science Fair. The Awards Ceremony will take place at 5:00 PM in the Sage Auditorium.

**Special Awards:** The purpose of these awards is to give recognition to specific areas of science research.

***Regional Awards:*** These special awards were developed by our Regional Fair and are not offered at the International finals.

### ***1. Albany College of Pharmacy-Biomedical Sciences Excellence Award***

The award is presented to individual(s) demonstrating outstanding achievement in the area of Biomedical Sciences at the Intel ISEF. This award, along with an annual \$5,000 tuition scholarship is valued at \$20,000. The tuition scholarship is renewable for four years and requires maintenance of a 3.0 grade point average and fulltime enrollment status.

**Award:** \$20,000 scholarship

### ***2. American Society for Microbiology, Eastern New York Branch***

This award is given to one project in the senior division and one project in the junior division that involves research related to microbiology.

**Award:** Certificate and \$50 check will be given to each single winner, while a \$25 check will be given to each member of a team project.

### ***3. Dudley Observatory***

The Dudley Observatory offers an award at the senior level and an award at the junior level for a project in astronomy or space science.

**Award:** Certificate and \$50 for junior awardee and \$100 for a senior awardee.

### ***4. National Association of Biology Teachers***

This award is given to one project in the senior division and one project in the junior division that involves research in the Life sciences.

**Award:** Certificate

### ***5. Nuclear Society***

This is for one project in the junior division & one project in the senior division that involves research related to energy.

**Award:** Certificate and \$50.00

### ***6. R.P.I. Scholarship***

Given to outstanding project for grades 9-11. The Planning committee for the Fair reserves the right whether or not to offer this award.

**Award:** \$40,000 (\$10,000 per academic year)

### **7. STANYS: Eleanor Miller Reed Science Research Award**

This award is given to one project in the senior division and one project in the junior division that “captures the spirit of science research.”

**Award:** Certificate and \$50 check will be given to each single winner, while a \$25 check will be given to each member of a team project.

**8. U.S. Air Force and Reserve** (given by representatives of the air force up to four awards; junior and/or senior division.

**Award:** Certificate, and other awards to be announced

**9. Walter Eppenstein Physics /Astronomy Award:** This award is for an outstanding physics or astronomy project. It is only for the senior division.

**Award:** Certificate and \$100 check.

**Intel ISEF Awards:** These awards are also offered at the International finals.

#### **1. American Meteorological Society**

Two awards for individual or team project (junior or senior division) for best meteorological exhibit.

**Award:** Certificate of Recognition

#### **2. American Psychological Association (APA) and Teachers of Psychology in secondary Schools (TOPSS)**

This award recognizes outstanding research in psychology under the category of behavioral and social sciences. No team award given.

**Award:** Certificate

#### **3. ASM Materials Education Foundation**

This award is for the best materials engineering project. The award will be a certificate and medallion. This is a single award in the Junior or senior division. The student will be presented with a preliminary certificate. No team award.

**Award:** Certificate and Medallion: The formal certificate and medallion will be mailed in July or August.

#### **4. Association for Women Geoscientists**

This award is offered to **female students**. These projects should exemplify high standards of innovativeness and scientific excellence in the geosciences. Special consideration will be given to projects that increase the public awareness of geosciences, illustrate the interdisciplinary nature of the geosciences, or promote the sensitivity to Earth as a global system. This may be given to the junior or senior division, team or individual.

**Award:** Certificate

#### **5. Intel Excellence in Computer Science Award**

Winners of the Intel Excellence in Computer Science Award will receive an Intel Award **Awards:** Certificate, \$200 and an Intel memento. This award may be given to an individual or a team. **The award is only for the senior division.** An individual or team may receive this award.

**Award:** Certificate and \$200 to be sent to student after the student completes the required paperwork. If a team award the \$200 will be shared by members of the team.

#### **6. Mu Apha Theta**

This is the National High School and Two-Year College Mathematics Club. It is intended that this recognition be awarded to a senior division individual or group project demonstrating the most challenging, thorough, creative investigation of a problem involving mathematics.

**Award:** Certificate

**7. National Oceanic and Atmospheric Administration (NOAA) “Taking the Pulse of the Planet” Award:**

This award goes to research that emphasizes NOAA’s mission to understand and predict changes in Earth’s environment and conserve and manage coastal and marine resources to meet our Nation’s economic, social and environmental needs. Individual award for Junior or Senior division.

**Award:** Certificate

**8. National Society of Professional Engineers**

This award is given to a project that demonstrates outstanding engineering principles and can identify any relevant ethical issues associated with the design. The award may also be given to a project that demonstrates applied engineering principles. Junior or senior division, no teams.

**Award:** Certificate and pin and subscription to *Engineering Times*

**9. Regional Ricoh Sustainable Development Award**

This award recognizes projects that demonstrate outstanding efforts in addressing issues of environmental responsibility and sustainable development. Junior or senior division

**Award:** Certificate

**10. Scientific American Subscription:** Scientific American recognizes outstanding student research. This award goes to the six grand prize awardees in the senior division and the top three grand prize winners in the junior division.

**Award:** Certificate and 1 year subscription to Scientific American

**11. Society for In Vitro Biology:** To be awarded to most outstanding 11<sup>th</sup> grade student exhibiting in the areas of plant or animal in vitro biology or tissue culture. This is a senior, individual award.

**Award:** Certificate

**12. Stockholm Junior Water Prize:** This is for the best projects related to water quality, water resource management, water protection, water treatment or wastewater treatment.

**Award:** Certificate for up to three participants in the division. Winners may register to compete in the State, competition. Ten finalists at the Intel International Fair will receive an all expense trip to Stockholm, Sweden where they will represent the United States to compete in the International Stockholm Junior Water Prize competition. Student must complete student data form.

**13. U.S. Army** (given by representatives of the army). Areas given include: Engineering, Environmental sciences, mathematics/computer science, life sciences (including behavioral & social sciences, medicine and health, microbiology, zoology and botany) and physical sciences. Up to five awards given out.

**Awards:** Certificates, medallions and other possible awards

**14. U.S. Department of Health and Human Services**

This research project should highlight how to keep healthy such as proper diet, exercise and not smoking. This may be given to the junior or senior division. No teams. Form must be completed by Fair Director.

**Award:** Certificate

**15. U.S. Metric Association**

This is for a student whose project involves a significant amount of quantitative measurement and which best uses the SI metric system for those measurements. This may be given to the junior or senior division, team or individual.

**Award:** Certificate

**16. U.S. Navy and Marine Corps**

Five awards are available. Two junior and three senior awards (individual and team).

**Award:** Certificate and other awards

### **17. Yale Science and Engineering Association Inc.**

This award is given to the most outstanding **11th grade** student exhibiting in the areas of Computer Science, Engineering, Physics or Chemistry (only individual projects).

**Award:** Certificate and pewter medallion sent to winner after Fair Director mails winner's form. A preliminary certificate will be provided recipient at the Fair

## **GRAND PRIZES**

### **1. Senior Division**

- 1st Place

**Award:** Certificate, gold medal, choice of Intel or Science Congress, \$500 from RPI School of Science; teams split the prize money.

- 2nd Place

**Award:** Certificate, silver medal, choice of Intel or Science Congress, \$300 from RPI School of Science; teams split the prize money.

- 3rd Place

**Award:** Certificate, bronze medal, invite to Science Congress, \$200 from RPI School of Science ; teams split the prize money.

- 1st Honorable Mention:

**Award:** Certificate, ribbon, invite to Science Congress, \$100 from RPI School of Science; teams split the prize money.

- 2nd Honorable Mention

**Award:** Certificate, ribbon, invite to Science Congress, \$75; teams split the prize money.

- 3rd Honorable Mention:

**Award:** Certificate, ribbon, runner-up to Science Congress, \$50.00.

### **2. Junior Division**

- 1st place:

**Award:** Certificate, gold medal, Invitation to *Society for Science and the Public (SSP) Program*,\* \$300 from RPI School of Science; teams split the prize money, invitation to *STANYS State Science Congress*.

- 2nd Place:

**Award:** Certificate, silver medal, Invitation to *Society for Science and the Public (SSP) Program*, \$200 from RPI School of Science; teams split the prize money, invitation to *STANYS State Science Congress*.

- 3rd Place:

**Award:** Certificate, bronze medal, Invitation to *Society for Science and the Public (SSP) Program*, \$100 from RPI School of Science; teams split the prize money, invitation to *STANYS State Science Congress*.

- 1st Honorable Mention:

**Award:** Certificate, ribbon, Possible invitation to *Society for Science and the Public (SSP) Program*, \$75; teams split the prize money.

- 2nd Honorable Mention:

**Award:** Certificate, ribbon, Possible invitation to *Society for Science and the Public (SSP) Program*, \$60; teams split the prize money.

- 3rd Honorable Mention:

**Award:** Certificate, ribbon, Possible invitation to *Society for Science and the Public (SSP) Program*, \$30; teams split the prize money.

The Intel International rules state that each regional fair can send up to two single projects and one team project to the International finals. The Planning Committee reserves the right to decide how many projects to send to the International finals. Members of the planning board will act as chaperones. Teachers of winning projects may be able to attend depending on funding. Schools may have to pay all or half of the cost.

Ten percent of the junior participants may be invited to compete in the *Society for Science and the Public (SSP) Program*. If there is a Team winning project then each person in the team counts as one of the five. Therefore, if first place went to a team of three then there would be two-three prizes left that can go to two-three individual projects or one team project.

