

The following are the results of the 2008 Michigan Science Fair held April 5, 2008 at Kettering University in Flint, Michigan. The Science Fair was the 14<sup>th</sup> Annual Michigan Science Fair with 60 students participating from the state. Four students won 4 year scholarships toward Kettering University, a total value of \$80,000. The scholarships are payable at \$5,000 per year for four years for each of the recipients.

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## **Kettering University Scholarships**

*The following students will receive \$20,000 scholarships for Kettering University, payable as \$5,000 per year for four years.*

**Brittany Stone, David McMillon, Thomas Thompson, and Rahul Pandey**

## **GRAND AWARD**

*The following Grand Award winners receive a plaque, a \$200 US Savings Bond and an all-expense paid trip to Atlanta, GA (May 11-16, 2008) where they will compete in the International Science and Engineering Fair.*

### **David McMillon**

Project: Optimizing the Accuracy of an Innovative Universal Positioning System  
Category: Earth & Space Science  
Grade: 12  
School: Saginaw Arts & Science Academy  
Teacher: John Barnes

### **Rahul Pandey**

Project: A 3-D Lens with Alternative Unit Cell Design for Negative Refractive Index  
Category: Physics  
Grade: 11  
School: Stoney Creek High School  
Teacher: David Thompson

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## **GRAND AWARD ALTERNATES SELECTED**

*The following students have been promoted to Grand Award Status by their local, regional Science Fairs due to the elevation of their student winners to Grand Award Status for the State competition. The following students will attend the International Science & Engineering Fair in Atlanta, GA (May 11-16, 2008) and represent their local,*

*regional Science Fair, and an all-expense paid trip to Atlanta, GA (May 11-16, 2008) where they will compete in the International Science and Engineering Fair.*

**Hari Arul (Detroit Regional Fair)**

Project: Synthesis of Silver Nanoparticle-Enabled Polymeric Membranes for Biofouling Mitigation  
Category: Environmental Science  
Grade: 12  
School: Detroit Country Day Upper  
Teacher: Gene Menton

**Nolan Ford (Saginaw Regional Fair)**

Project: Using AlamaBlue for an Assessment of ORP of EGCG in a Culture Model of HD  
Category: Biochemistry  
Grade: 12  
School: Saginaw Arts Science Academy  
Teacher: Matt Miller

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## **FIRST PLACE**

*The following First Place winners receive a \$200 US Savings Bond and a plaque.*

**Brittany Stone**

Project: The Relationship Between Nutrients in Feed and Strength of Eggshells  
Category: Zoology  
Grade: 12  
School: Whiteford Agricultural School  
Teacher: Janet Weygand

**Shubhangi Arora**

Project: Effects of Antibacterial Agents on Bacterial Resistance  
Category: Microbiology  
Grade: 9  
School: Novi Senior High School  
Teacher: Kristen Shupick

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## **SECOND PLACE**

*The following Second Place winners receive a \$100 US Savings Bond and a plaque.*

**Joanne Christy**

Project: A Novel Approach to SPF Determination of Sunscreens  
Category: Chemistry  
Grade: 9  
School: Powers Catholic High School  
Teacher: Dan Duncan

**Cody Campbell**

Project: Got Gas--Again  
Category: Environmental Sciences  
Grade: 11  
School: Imlay City high School  
Teacher: Paul Druker

**Thomas Thompson**

Project: The Effects of Autoencoders on Unlabeled Data for Pattern Recognition  
Category: Computer Science  
Grade: 11  
School: Huron High School  
Teacher: Dee Drake

**Kevin Shih**

Project: IgG Antibody-Attached TiO<sub>2</sub> Nanotubes for Targeted Drug Delivery  
Category: Medicine & Health  
Grade: 11  
School: International Academy  
Teacher: David Lyons

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## **THIRD PLACE**

*The following Third Place winners receive a \$75 US Savings Bond and a plaque.*

**Kuan Ting Chen**

Project: Evaluation of Laser Display Projector  
Category: Engineering  
Grade: 11  
School: Cranbrook Kingswood Upper School  
Teacher: John Joseph Winter

**Dalton Allan**

Project: An Analysis of Error in Rational Approximations

Category: Mathematics  
Grade: 9  
School: Saginaw Arts Science Academy  
Teacher: Stephen Tack

**Christen Robinson**

Project: Carbon Dioxide Filtration Caustic Hydroxides and Solid Absorption Process  
Category: Engineering  
Grade: 12  
School: Saginaw Arts Science Academy  
Teacher: Dan Sealey

**Jahanavi Ramakrishna**

Project: The Effect of Attentional Load on Reaction Times  
Category: Behavioral Sciences  
Grade: 10  
School: Detroit Country Day Upper  
Teacher: Gene Menton

**Hyunje Cho**

Project: Effects of Mercury Exposure on Experimental Autoimmune Encephalomyelitis (EAE)  
Category: Medicine & Health  
Grade: 12  
School: Grosse Pointe South High  
Teacher: James Adams

**Helen Yang**

Project: Using Arugula to Manage the Northern Root-knot Nematode in Variable Soil Types  
Category: Environmental Science  
Grade: 12  
School: Troy High School  
Teacher: Rebecca Johns

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## **FOURTH PLACE**

*The following Fourth Place winners receive a \$50 US Savings Bond and a plaque.*

**Charles Zhang**

Project: Development of a vibration energy harvesting device  
Category: Engineering

Grade: 11  
School: Rochester Adams High School  
Teacher: Christine Deyo

**Giacomo Bologna**

Project: Hull Design's Effect of the Efficiency of Displacement Boats  
Category: Engineering  
Grade: 10  
School: Divine Child High School  
Teacher: Steven Dickie

**Zeinab Hachem**

Project: The potential Fertilizer Effect on the Detroit River: Year 2  
Category: Botany  
Grade: 12  
School: Dearborn Center for Math, Science & Technology  
Teacher: Karen Pikula

**Ashwaty Chennat**

Project: Is dance really a stress reliever?  
Category: Physics  
Grade: 10  
School: Huron High School  
Teacher: Dee Drake

**Joseph Goetz**

Project: The effects of compost on Soil's Characteristics  
Category: Environmental Science  
Grade: 12  
School: Blissfield High School  
Teacher: Laurie Isley

**Ayse Hirioglu**

Project: Electrical Breakdown of Vegetable Oil as an Insulating Material  
Category: Engineering  
Grade: 10  
School: Carman Ainsworth High School  
Teacher: Mrs. Lotfi

**Crystal Zhang**

Project: Bacterial polymerase drives RNA synthesis by reading smooth DNA template tract  
Category: Microbiology  
Grade: 11  
School: Troy Athens High School  
Teacher: Rachel Peterson

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