

The following are the results of the 2011 Michigan Science Fair held April 9, 2011 at Kettering University in Flint, Michigan. The Science Fair was the 17th Annual Michigan Science Fair with 62 students participating from the state. Five 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.

Kettering University Scholarships

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

Andrew Thelkeld, Andrea Pugh, Ali Habhab, Ahmad Hider, Brandon Roach

GRAND AWARD

The following Grand Award winners receive a certificate, and an all-expense paid trip to Los Angeles, CA (May 8-13, 2011) where they will compete in the International Science and Engineering Fair.

Chengzhen Dai

Project: Role of Drosophila Glial Cells in Circadian Regulation of Locomotor Activity
Category: Zoology
Grade: 11
School: Detroit Country Day Upper
Teacher: Gene Menton

Lois Gagnon

Project: Detection of Radioactive Isotopes in the Radon Decay Chain
Category: Physics
Grade: 11
School: Gagnon Family Homeschool
Teacher: Thomas Gagnon

FIRST PLACE

The following First Place winners receive a certificate and a \$200 US Savings Bond

Matthew Bauerle

Project: Reformulating the Newton Direction Computation as a Least Squares Problem
Category: Mathematics
Grade: 11
School: Bauerle Homeschool
Teacher: Mary Bauerle

Nithin Tumma

Project: Identifying Novel Mechanisms of Cytochrome P450 2E1 regulation
Category: Biochemistry
Grade: 11
School: Port Huron Northern High School
Teacher: Anna Jamison

SECOND PLACE

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

Hannah Cheriyan

Project: The Effects of Epidermal Growth Factor (EGF)-like Growth Factor Ligands on EGF
Category: Biochemistry
Grade: 12
School: Detroit Country Day Upper
Teacher: Gene Menton

Goutham Kapa

Project: Converging Logarithmic Spirals on the Complex Plane
Category: Mathematics
Grade: 12
School: Troy High School
Teacher: Rebecca Brewer

Emily Macomber

Project: Oil in Water: Freshwater Lessons from the Gulf Oil Disaster
Category: Environmental Science
Grade: 10
School: Saginaw Arts & Science Academy
Teacher: Matthew Miller

Vipul Nandigala

Project: Toroidal Rings
Category: Physics

Grade: 9
School: Detroit Country Day Upper
Teacher: Gillian VonSeeger

THIRD PLACE

The following Third Place winners receive a certificate and a \$50 US Savings Bond

Disha Bora

Project: Potential of Cord Blood Derived AC133+ Stem Cells to Give Neuronal Cell Types
Category: Medicine & Health
Grade: 12
School: Detroit Country Day Upper
Teacher: Gene Menton

Philip Brown

Project: Propane Lawnmower
Category: Engineering
Grade: 10
School: Devine Child High School
Teacher: Marcia Reetz

Sidharth Chand

Project: Comparative Significance of Cell Spreading and Division in Monolayer Reform
Category: Medicine & Health
Grade: 10
School: Detroit Country Day Upper
Teacher: Gene Menton

Ali Habhab

Project: Liquid Organic Compost Fertilizer
Category: Engineering
Grade: 10
School: Dearborn Center for Math, Science and Technology
Teacher: Jeff Whittaker

Ahmad Hider

Project: Geomagnetic Effects on the Wide Area Augmentation System
Category: Physics
Grade: 10
School: Dearborn Center for Math, Science and Technology

Teacher: Jeff Whittaker

Brandon Roach

Project: Chirality: The Relationship Between Angle of Rotation and Concentration
Category: Chemistry
Grade: 10
School: Detroit Catholic Central
Teacher: Steve Lemieux

Aaron Szytman

Project: Power Plant : Trees Generating Electricity
Category: Botany
Grade: 10
School: Divine Child High School
Teacher: Steven Dickie

Shirley Wu

Project: The Synergistic Effect of the PIK3CA gene mutation H1047R and the Her
2 gene i
Category: Medicine & Health
Grade: 11
School: Detroit Country Day Upper
Teacher: Gene Menton

FOURTH PLACE

The following Fourth Place winners receive a certificate and a \$25 US Savings Bond.

Phillip An

Project: Proinflammatory cytokine TNF- α ; regulates sphingolipid signaling
in Human
Category: Biochemistry
Grade: 9
School: International Academy
Teacher: Katherine Hyso

Rohan Arepally

Project: Catastrophic Disaster Response and Recovery Logistics System
Simulation
Category: Computer Science
Grade: 12
School: Stoney Creek High School
Teacher: David Thompson

Jose Gomez

Project: On Shaky Ground: A Study of Structural Strength During Earthquake Simulations
Category: Engineering
Grade: 12
School: Saginaw Arts & Science Academy
Teacher: John Barnes

Niranjana Kannan

Project: Car Collisions
Category: Physics
Grade: 12
School: Detroit Country Day Upper School
Teacher: Harry Fried

Nadine Makki

Project: Cancer Stem Cells: The Key to Cancer Cure?
Category: Medicine & Health
Grade: 10
School: Divine Child High School
Teacher: Kathy Higgins-Luthman

Andrea Pugh

Project: An Alternative Pathway For Waste Streams
Category: Environmental Science
Grade: 11
School: Saginaw Arts & Science Academy
Teacher: John Barnes

Amy Sun

Project: Humidity and Impact on EGR Scheduling
Category: Engineering
Grade: 11
School: Detroit Country Day Upper
Teacher: Gene Menton

Cuthbert Sun

Project: Computational and Experimental Studies of Human SLX4 Protein BTB domain
Category: Biochemistry
Grade: 10
School: Andover High School
Teacher: Dennis Kwasny

Lily Zmachinski

Project: Musicians vs. Non-musicians on Neuropsychological Tests

Category: Behavioral and Social Sciences
Grade: 10
School: Skyline Health and Medicine Magnet
Teacher: Jeffrey Bradley

Keaton Zonca

Project: Ocean Floor Affecting Tsunami Size?
Category: Earth & Space Sciences
Grade: 10
School: Divine Child High School
Teacher: Lathy Higgins-Luthman
