

The following are the results of the 2012 Michigan Science Fair held March 31, 2012 at Kettering University in Flint, Michigan. The Science Fair was the 18th Annual Michigan Science Fair with 58 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.

Alexander Dutton, Erik Weston, Noah Kihata, and Terri O'Neal

GRAND AWARD

The following THREE Grand Award winners receive a certificate, and an all-expense paid trip to Pittsburgh, PA (May 13-18, 2012) where they will compete in the International Science and Engineering Fair.

Lilia Popova

Project: Probing the Role of Nutrient Activity in Magnetically Induced Plant Growth
Category: Botany
Grade: 11
School: Huron High School
Teacher: Dr. Cinda-Sue Davis

Alexander M Dutton

Project: from SPARK to LIGHTNING
Category: Engineering
Grade: 10
School: Dutton Homeschool
Teacher: Kathryn Dutton

Chengzhen L Dai

Project: A Novel Bioassay Method to Detecting Chemical Water Contaminants
Category: Environmental Science
Grade: 12
School: Detroit Country Day School
Teacher: Gene Menton

FIRST PLACE

The following First Place winners receive a certificate and a \$150 US Savings Bond

Jesse M Jenter

Project: Eluents from platelet-rich fibrin matrices constructs increase tendon cell
pro

Category: Medicine & Health

Grade: 10

School: Detroit Catholic Central High School

Teacher: Steve Lemieux

SECOND PLACE

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

Ishan Mehta

Project: Detection of Efflux-Mediated Resistance in Clinical Isolates of S.
agalactiae

Category: Microbiology

Grade: 12

School: Port Huron Northern High School

Teacher: Anna Jamison

Anusha Ponduri

Project: Role of Chemo-Resistant and miRNA Over-Expressing Cells in Colorectal
Cancer

Category: Medicine & Health

Grade: 11

School: Detroit Country Day

Teacher: Gene Menton

Cody Liu

Project: Copper-Induced Changes in Locomotor Behavior, Cell Regeneration, and
Enzyme Fu

Category: Environmental Science

Grade: 10

School: Detroit Country Day

Teacher: Gene Menton

Madhurima Das

Project: Fractal Dimension Analysis to Predict Cancer

Category: Mathematics

Grade: 10

School: Plymouth High School

Teacher: Michael Spitz

THIRD PLACE

The following Third Place winners receive a certificate and a \$75 US Savings Bond

Vipul A Nandigala

Project: The Effect of Channel Geometry On Microfluidic Vortex Flow

Category: Physics

Grade: 9

School: Walled Lake Western High School

Teacher: Thomas Saloka

Kyungmo E Ryu

Project: Divisibility Rule of 3 in different bases

Category: Mathematics

Grade: 10

School: Detroit Country Day School

Teacher: Ross Arseneau

Antonia L Busch

Project: Beta-carotene diet supplementation increases cholesterol level in chicken eggs

Category: Biochemistry

Grade: 12

School: Hillsdale Academy

Teacher: Christopher Heckel

Felicia N Patel

Project: The Effects of Green Tea and Ethanol on the Heart Rate of Daphnia

Category: Biochemistry

Grade: 9

School: Saginaw Arts & Science Academy

Teacher: Matthew Miller

Katherine L DuRussel

Project: Perfume or Poison? Using IR Spectroscopy to Test Perfumes for Phthalates
Category: Chemistry
Grade: 9
School: Reese High School
Teacher: Dr. Kenneth Kearns

Ashi Arora

Project: The Role of the Gene ZCF28 in Regulating Antifungal Resistance in *C. albicans*
Category: Microbiology
Grade: 9
School: Novi Senior High School
Teacher: James Didio

FOURTH PLACE

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

David Bai

Project: The Role of Bradykinin on Breast Cancer Cells
Category: Biochemistry
Grade: 12
School: Troy High School
Teacher: Rebecca Brewer

Aaron L Zeng

Project: Average Complexity of Quicksort
Category: Computer Science
Grade: 10
School: Detroit Country Day School
Teacher: Barry Webster

Sheeba Pawar

Project: Redefining the function of a pseudogene-junk DNA or an oncogene?
Category: Medicine & Health
Grade: 11
School: Huron High School
Teacher: Dr. Chandan Kumar-Sinha

Andrea A Pugh

Project: Invasive to Innovative: Phagmites Biochar Production Analysis of its Ability to
Category: Environmental Science

Grade: 12
School: Saginaw Arts & Sciences Academy
Teacher: John Barnes

John L Shinnars

Project: The Effect of Protein Supplements on the Protein Concentration of
Crickets
Category: Zoology
Grade: 12
School: Saginaw Arts & Sciences Academy
Teacher: Matthew Miller

Erik V Weston

Project: Controllable Tension Drumstick Assembly
Category: Engineering
Grade: 10
School: Dearborn Center for Math, Science & Tech
Teacher: Jeff Whittaker

Brian Xu

Project: Magnetic Field Effect on Microalgae for Biofuel Production
Category: Environmental Science
Grade: 12
School: Detroit Country Day Upper
Teacher: Gene Menton
