

The 55th Science & Engineering Fair of Metropolitan Detroit (SEFMD) was held today, March 14, 2012 at Cobo Center. Over 1,600 students from schools in Wayne, Oakland and Macomb counties competed at SEFMD, one of the longest running and largest science fairs in the world. The Senior Grand Award winners will compete at the Michigan Science Fair on March 31 at Kettering University and at the International Science Fair May 13-18 in Pittsburgh, Pennsylvania.

2012 Senior Division ISEF Finalists

David Bai

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

Madhurima Das

Project: Fractal Dimension Analysis to Predict Cancer
Category: Mathematics
Grade: 10
School: Plymouth High School
Teacher: Michael Spitz

Ananya Mukundan

Project: Nano-Tesla Magnetic Field Sensors For An Early Warning System For Earthquakes
Category: Physics
Grade: 12
School: International Academy-East Campus
Teacher: Jackie Toepel

Vipul Nandigala

Project: The Effect of Channel Geometry On Microfluidic Vortex Flow
Category: Physics
Grade: 9
School: Walled Lake Western High
Teacher: Thomas Saloka

Hyunjoon Song

Project: Classification-Based Music Recognition Using Learned Feature Representations
Category: Computer Science
Grade: 11
School: Novi Senior High School
Teacher: James Didio

Shirley Wu

Project: A Study of the PIK3CA Mutant H1047R and Her2 Genes With And Without Inhibitors
Category: Medicine & Health
Grade: 12
School: Detroit Country Day Upper
Teacher: Gene Menton

Catherine Buchanan with John Drabik

Project: The Effect of Cow Urine and its Components as a Fire Retardant on Cotton Fabric
Category: Team Project in Chemistry
Grade: 12
School: Macomb Mathematics Science Technology Center
Teacher: Jamie Hilliard

2012 Junior Division Grand Awards

Frances Grier

Project: The Effect Of Structure Shape On The Amount Of Drag From Wind Loads
Category: Environmental Science
Grade: 8
School: Brewer Academy
Teacher: Krystal Bolar

Mike Mercier

Project: Does The Food A Whitetail Deer Eats Effect Its Antler Growth?
Category: Zoology
Grade: 7
School: Great Oaks Academy (PSA)
Teacher: Chris Livingston

Prayer Mitchell

Project: Good to The Last Drop?
Category: Botany
Grade: 8
School: Douglass Academy for Young Men-Middle
Teacher: Sheryl Rucker

Marisa Perez

Project: Algae Growth in Lake Saint Clair: The Impact of Fertilizer
Category: Environmental Science
Grade: 6
School: St. Isaac Joques Elementary
Teacher: Susan Vandermeer

Shelby Tate

Project: Are You Seeing Spots?
Category: Microbiology
Grade: 8
School: Ivan Ludington Magnet Middle
Teacher: Denise Wallace Hytower

Stephen Walz

Project: The Health Effects of High Energy Drinks - Are They Dangerous?
Category: Medicine & Health
Grade: 8
School: Immaculate Conception Ukrarian Catholic Academy
Teacher: Judith Hicks

Jeremy Webb

Project: Strength In Magnets
Category: Physics
Grade: 7
School: St. Michael Elementary - Livonia
Teacher: Kate Harding

Benjamin Yared

Project: How Does Color of Text Affect Recall?
Category: Behavioral Science
Grade: 7
School: Detroit Country Day Middle
Teacher: Daniel Case

Nadia Khan with Izzah Baig

Project: Studies in Successful Hatching: pH and the Hatching of Artemia Salina
Category: Team Project in Earth and Space Sciences
Grade: 6
School: Huda School & Montessori
Teacher: David Egan