

**Grand Prize Nominees
Fairfax County Regional Science
and Engineering Fair**

March 29, 2009

Animal Sciences

Jonathan L. Hsu, Andrew Z. Lam

Thomas Jefferson H S
for Science and
Technology

Resveratorol-Induced Regulation of Dauer State

Behavioral and Social
Sciences

Victoria M. Saadat

Thomas Jefferson H S
for Science and
Technology

Spatial Memory Analysis After Hippocampal Lesion

Behavioral and Social
Sciences

Alexander L. Peterkin

Oakton High School

Cognitive Enhancements: Misuse or Self-Treatment?

Biochemistry

Vishwajith Sridharan

Thomas Jefferson H S
for Science and
Technology

pVISIA: Vector for Surface Display of Immunogens

Cellular and
Molecular Biology

Jessica F. Liu

Thomas Jefferson H S
for Science and
Technology

Mechanism of Cyclin D1 Downregulation by Rassfia

Cellular and
Molecular Biology

LeeAnn K. Li

Thomas Jefferson H S
for Science and
Technology

The Role of S6Kinase in Stem Cell Cardiomyogenesis

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Computer Science **Shriranjana Karthikeyan** Chantilly High School

Computer Simulated Drug Pharmacokinetics

Computer Science **Joseph K. Jachowski** Thomas Jefferson H S
for Science and
Technology

Recognizing Spoken Vowels by Automated Lip Reading

Computer Science **Peyman Pejman, Marco A. Segura,
Soham K. Trivedi** Robinson Secondary

Computer Vision and the Eye

Computer Science **Syed Hassan, Farhang Hooshmandnia,
Arian Khorshid** Marshall High School

Text Summarization Using Multilayer Neural Network

Earth and Planetary
Science **Akshar Wunnava** Thomas Jefferson H S
for Science and
Technology

Effect of Aerosol Diameter on Extinction at 500 NM

Earth and Planetary
Science **Varun Bansal** Thomas Jefferson H S
for Science and
Technology

A New Satellite Data-Based Global Drought Index

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Engineering: Materials
and Bioengineering

Yangbo Xu

Thomas Jefferson H S
for Science and
Technology

Exploring PBG Crystal-Optical Range Metamaterial

Engineering: Materials
and Bioengineering

Sara W. Almousa, Noha A. Sherif

Islamic Saudi Academy

Microbial Cell Fueled By Organic Waste Grown Algae

Engineering: Electrical
and Mechanical

Gavin Campbell, Michael E. Conway

Marshall High School

Body Changes to a Die-cast Car on Wind Resistance

Engineering: Electrical
and Mechanical

Jack M. Bechert, Scott C. Mattocks

Fairfax High School

A Rotating Wing with a Variable Angle of Attack

Energy and
Transportation

William S. Mannon

Langley High School

Effect of Lights on Production of a Solar Module

Energy and
Transportation

Atif M. Javed, Alex S. Kuck

Fairfax High School

Capturing Energy from Asphalt

Energy and
Transportation

Lindsey I. Davis, Loren D. Koch

Madison High School

How Green is Peanut Biodiesel Fuel?

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Environmental Analysis **Anita Chitnis, Suzanne C. Estrada** Chantilly High School

The Effect of Bisphenol-A on Daphnia Magna

Environmental Analysis **Bonnie D. Beckner, Aimee E. DeSoto,
Kara M. Oyhenart** Robinson Secondary

The Effect of Urbanization of Stream Health

Environmental
Management **Edward Kim** McLean High School

The Suffocating Effect of Urban Trees

Mathematical Sciences **Curtis A. Khol** Madison High School

A New Approach Encryption

Medicine and Health
Sciences **Rishi Iyengar** Thomas Jefferson H S
for Science and
Technology

Decorin Reduces Fibrotic Activity in Vitro

Microbiology **Devika Pateriya** Chantilly High School

Antibacterial Effects of Carbon Nanotubes

Physics and Astronomy **Robert W. Meyer** Robinson Secondary

Asymmetrical Vortex Shedding of Rotating Airfoils

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Physics and Astronomy

Narendra P. Tallapragada

Thomas Jefferson H S
for Science and
Technology

Determining Dielectric Behavior From The Bottom Up

Physics and Astronomy

Olivia K. Baskerville, Eian G. Burgess

Marshall High School

A Magnetic Levitation Presentation

Plant Sciences

**Kathleen M. Atkatsh, Manna Fujii, Sapir
Nachum**

Thomas Jefferson H S
for Science and
Technology

Acidity Affects Phototaxis in Volvox Globator

Plant Sciences

Neggin Assadi, Kanako Matsuda

Madison High School

The Effect of Magnet Distance on Plant Growth

Plant Sciences

**Silvia Cho, Yura Kim,
Camille A. Lorenzana**

Marshall High School

Competition Among Lentils and Mung Beans

Plant Sciences

Shannon L. Hoff, Daniel M. Santos

Stuart High School

The Effect of Vitamin C on Pea Plants

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