



# 2026 Middle School State Fair Award Winners

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## Cabot Grand Award

<b>Aagam Shah and Chittesh Patel</b>	Benjamin Franklin Classical Charter Public School	<i>Selective Capture of Harmful Pathogens Using a Mucin-Based Trapping Mechanism</i>
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## First Place Awards

<b>Mohammad Ibrahim Riaz</b>	The Islamic Academy for Peace	<i>Removing Microplastics from Water Using Magnetic Nanoparticles</i>
<b>Siyona Agarwal</b>	Home School - Milton	<i>Turning RNA Against Brain Cancer: Computational Design of RNA-Based Aptamers Targeting RNA Polymerase II for Glioblastoma Multiforme (GBM) Diagnostics and Therapeutics</i>
<b>Neelesh Saroha</b>	Oak Middle School	<i>Smart Face Tracking Mobility Device for the Physically Disabled</i>
<b>Sian Nissam</b>	Worcester Academy	<i>Sniffing Out Cancer: Behavioral Chemotaxis of C. elegans to Tumor-Specific Volatile Organic Compounds</i>
<b>Ahaan Prakash</b>	Oak Middle School	<i>Prevention of Sleepwalking Caused Injuries</i>
<b>Grahitha Sandeep</b>	Oak Middle School	<i>Biodegradable Enzyme-Based Food Packaging</i>

**Julie Suarez**

St. Catherine of Siena  
Middle School (Norwood)

*Signal Degradation*

**Adharsana Balamurugan,  
Milin Bobby and Shalinie  
Loganathan Srinivasan**

Sarah W Gibbons Middle

*Soundtrack to Success: How Different Genres  
of Music Affects Focus and Efficiency*

**Zaynab Shakir**

The Islamic Academy for  
Peace

*Design & Evaluation of a Sustainable & Low-  
cost Electrostatic & Bio-Enhances Air Filtration  
System*

**Elizabeth Klein and  
Phelan Curry**

Newton Country Day  
School

*A Warm In-TENT-ion!*

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## Second Place Awards

**Priya Iyer**

Ashland Middle

*COMPAS: Cognitive Observation, Mapping, and  
Protection for Archaeologists' Safety*

**Pranav Nittala**

Oak Middle School

*MagPatch: Magnetic Repair of BBB Micro Leaks*

**Abigail Chen**

Weston Middle

*Differential Effects of Alcohol vs Antioxidant  
Compounds on Cellular Regeneration and  
Behavioral Responses in Planarians*

**Andrew Zhang**

Raymond J Grey Junior  
High

*How fatigue develops after movement patterns  
in racket sports.*

**Manvi Rudra and  
Nischitha Cheepurpalli**

Sarah W Gibbons Middle

*The Effect of Vitamins on Cell Growth*

**Koji Ohara**

Raymond J Grey Junior  
High

*A Smart Chessboard: Detecting Individual Chess  
Pieces using Copper Tape and Resistance  
Material*

**Andrew Courville**

Eliot Elementary

*Designing the Perfect Paper Airplane*

**Aiden Lowe**

St. Francis Xavier School,  
Acushnet

*Paper Plane Physics*

<b>Maryam Zaheer and Roudha Siddiq</b>	The Islamic Academy for Peace	<i>Cool Pavers- Reducing Urban Heat Island Effect</i>
<b>Dishita Noolu</b>	Benjamin Franklin Classical Charter Public School	<i>Does a natural bandage infused with healing and antibacterial ingredients promote faster skin recovery than a regular store-bought bandage</i>
<b>Samuel Cohen</b>	Pioneer Charter School of Science II (PCSS-II)	<i>The Effects of Sphagnum Moss In High Flood Risk Areas</i>
<b>Vikunth Murali</b>	Sherwood Middle School	<i>How does the moon appear to change color on some days and not others?</i>
<b>Daniel Hannigan</b>	St. Francis Xavier School, Acushnet	<i>Plastic Roots</i>
<b>Nishka Veerreddy</b>	P Brent Trottier	<i>Grounds for Growth: Do Coffee Grounds Benefit Plants?</i>
<b>Vasudha Mavanur</b>	Littleton Middle School	<i>Effect of Post Encoding Exercise on False Memory Using the DRM Cognitive Paradigm and Studying Variations in Gamma Brainwave Oscillations</i>

### Third Place Awards

<b>Siddhanth Chollangi</b>	New England Innovation Academy	<i>Using Seaweed as a Fabric</i>
<b>Charlotte Mitchell, Lulu Meng and Milena Rufo</b>	Newton Country Day School	<i>Ramping It Up</i>
<b>Karthikeya Poranki</b>	North Attleborough Middle	<i>Multimodal Molecular Mapping via A3m Supercluster for Pre-Symptomatic Stratification and Enhanced Phenotyping of Colorectal Cancer</i>
<b>Marie Jagiello and Vivienne Fusco</b>	St Joseph School (Wakefield)	<i>Mmm, Yummy Plastic!</i>
<b>Esma Boztas</b>	The Islamic Academy for Peace	<i>Reaction Time under Cognitive Load</i>
<b>Alexia Matheos, Colette Baugh and Mary Ellen Kasinger</b>	Newton Country Day School	<i>From Sunblock To Pond Life</i>
<b>Jackson Nugent</b>	Barnstable Intermediate School	<i>Video Games and Reaction Times</i>

<b>Sanjay Malhotra</b>	Eliot Elementary	<i>Are Sodas and Juices as Safe as they Seem?</i>
<b>Prathik Polepally</b>	Oak Middle School	<i>Making a Borax Crosslinked PVA Based Plastic to Make a Ecofriendly, Safe, Nontoxic Alternative to Plastics Containing Phthalates</i>
<b>Aahaan Punjabi, Mohana Krishnan Narayanan and Tejas Prasad</b>	Hopkinton	<i>Using Calcium Alginate beads to remove heavy metals from water</i>
<b>Darsh Verma</b>	North Attleborough Middle	<i>Is it possible to put an ERS in the common vehicle in the cheapest most effective manner?</i>
<b>Jayashri Deshamouni</b>	Oak Middle School	<i>Antibacterial Agents Effectiveness on Biodegradable Patches</i>
<b>Violet Malcolm</b>	Lesley Ellis School	<i>Engineering the Perfect Pancreas: Python Algorithms for Glycemic Control</i>
<b>Rosie Cronin</b>	St. Catherine of Siena Middle School (Norwood)	<i>EMR Protective Pocket</i>
<b>Kashvi Agrawal</b>	North Attleborough Middle	<i>Synthesis and Performance Analysis of Gelatin-Based Activated Charcoal Hydrogel Pearls for Water Purification</i>
<b>Safa Ubaidu and Yahya Junaid Siddiq</b>	The Islamic Academy for Peace	<i>Impact of Rapid Stimuli on Decision Accuracy.</i>
<b>Joshua Chiu</b>	The Park School	<i>Do microplastics in dirt affect the health of earthworms and can the microplastics be removed?</i>
<b>Aarti Ravikumar</b>	Pioneer Charter School of Science II (PCSS-II)	<i>Fractal Exploration</i>
<b>Anagha Balagurumoorthy and Shreya Kirikera</b>	Benjamin Franklin Classical Charter Public School	<i>Investigation of Pharmaceutical Waste in Public Water Systems</i>

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### Honorable Mention

**Avni Pisharody and Ilia Grzegorzewski**

Pioneer Charter School of Science II (PCSS-II)

*Generating electricity through exercise machines*

**Trisha Bhatt**

North Attleborough Middle

*How pH Changes Affect Cell Health and Function*

<b>Vasudha Madhusudhan</b>	Oak Middle School	<i>BleedSmart: A Bleeding Disorder Tracker</i>
<b>Jason Chang</b>	Worcester Academy	<i>HelioSphere: A Buckyball-Inspired Fresnel Lens Concentrator for Enhanced Photovoltaic Performance</i>
<b>Lucas Chen</b>	Fay School	<i>Methods of High Efficiency Aero Turbines</i>
<b>Tanvi Nilawar</b>	Grafton Middle	<i>Geographic Drivers of Antibiotic Resistance</i>
<b>Addison Gundlach and Tyler Kettell</b>	Barnstable Intermediate School	<i>Testing Different Amounts of Electrolytes in Sports Drinks</i>
<b>Carlos Santoyo, David Ting and Julian Park</b>	Pioneer Valley Chinese Immersion Charter School	<i>CRISPR efficiency</i>
<b>Emma Doyle, Marian Emans and Sophia Geiman</b>	Newton Country Day School	<i>Glow to Grow: Radishes in the Light Show</i>
<b>Mansha Khatri and Poorvi Rajaboyina</b>	Benjamin Franklin Classical Charter Public School	<i>Freezing of Different Water Types</i>
<b>Zachary Soong</b>	Lesley Ellis School	<i>The Natural Solution to Noise Pollution</i>
<b>Shrihan Nair</b>	Oak Middle School	<i>NaviTag: Fast Multilingual NFC Navigation in Large-Buildings</i>
<b>Simon Menzies</b>	Quincy Upper School	<i>AI vs human: who took that picture?</i>
<b>Shaarav Chogle</b>	Hingham Middle School	<i>Can we find a strong binding molecule (ligand) to stop Tau Protein clumping in Frontotemporal Dementia (FTD)?</i>
<b>Aadyaa Raj and Suhana Sapru</b>	Sarah W Gibbons Middle	<i>UV-Induced Oxidation on Banana Peels</i>
<b>Georgio Cordova</b>	Lesley Ellis School	<i>Optimizing Carbon Dioxide Sequestration in Ulva Lactuca: Mars Colony Life-Support Applications of Algal Photobioreactors</i>
<b>Zoanna Brown</b>	John F Kennedy Middle School	<i>An Inexpensive Polarimeter for Safer Pesticide Use</i>

**Aarna Girish, Adamy  
Gaur and Adhi Reddy**

Raymond J Grey Junior  
High

*WIRE-CVD: A Novel Stacking Ensemble with  
TIDES Uncertainty Quantification to Mitigate  
Female Underdiagnosis in Cardiovascular Risk*

**Finn Hughes**

St. Catherine of Siena  
Middle School  
(Norwood)

*Solar Panel Angles*

**Gabriela Callado**

Boston Latin

*Life on Mars*

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## Category Excellence Awards

### Engineering Excellence Award

**Neelesh Saroha**

Oak Middle School

*Smart Face Tracking Mobility Device for the  
Physically Disabled*

### Computer Science & Mathematics Excellence Award

**Karthikeya  
Poranki**

North Attleborough  
Middle

*Multimodal Molecular Mapping via A3m Supercluster  
for Pre-Symptomatic Stratification and Enhanced  
Phenotyping of Colorectal Cancer. (MMMSPCC)*

### Bioscience Excellence Award

**Pranav Nittala**

Oak Middle School

*MagPatch: Magnetic Repair of BBB Micro Leaks*

### Chemistry Excellence Award

**Siyona Agarwal**

Home School  
- Milton

*Turning RNA Against Brain Cancer: Computational Design of  
RNA-Based Aptamers Targeting RNA Polymerase II for  
Glioblastoma Multiforme (GBM) Diagnostics and Therapeutics*

### Physics Excellence Award

**Andrew Courville**

Eliot Elementary

*Designing the Perfect Paper Airplane*

### Environmental Science Excellence Award

**Mohammad  
Ibrahim Riaz**

The Islamic Academy for  
Peace

*Removing Microplastics from Water Using Magnetic  
Nanoparticles*

## Behavioral & Social Science Excellence Award

Sian Nissam

Worcester Academy

*Sniffing Out Cancer: Behavioral Chemotaxis of C. elegans to Tumor-Specific Volatile Organic Compounds*

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## Special Awards

### Broadcom Coding with Commitment® Award

Aarti Ravikumar

Pioneer Charter School of  
Science II (PCSS-II)

*Fractal Exploration*

### Lemelson Early Inventor Prize

Ahaan Prakash

Oak Middle School

*Prevention of Sleepwalking Caused Injuries*

### Citadel Securities Innovation Prize

Zaynab Shakir

The Islamic Academy  
for Peace

*Design & Evaluation of a Sustainable & Low-cost  
Electrostatic & Bio-Enhances Air Filtration System*

### Shark Ninja G.R.I.T Award

Camila Suncar  
Capellan

Sullivan Middle

*3D-printed Biomedic Arm Socket*

### Cabot Rising Star Award

Maryam Zaheer and  
Roudha Siddiq

The Islamic Academy for  
Peace

*Cool Pavers- Reducing Urban Heat Island  
Effect*

### Clark University Challenge Convention, Change the World Research Award

Grahitha Sandeep

Oak Middle School

*Biodegradable Enzyme-Based Food Packaging*

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## Thermo Fisher Junior Innovators Challenge Delegates

<b>Aagam Shah and Chittesh Patel</b>	Benjamin Franklin Classical Charter Public School
<b>Mohammad Ibrahim Riaz</b>	The Islamic Academy for Peace
<b>Siyona Agarwal</b>	Home School - Milton
<b>Neelesh Saroha</b>	Oak Middle School
<b>Sian Nissam</b>	Worcester Academy
<b>Ahaan Prakash</b>	Oak Middle School
<b>Grahitha Sandeep</b>	Oak Middle School
<b>Julie Suarez</b>	St. Catherine of Siena Middle School (Norwood)
<b>Adharsana Balamurugan, Milin Bobby, and Shalinie Loganathan Srinivasan</b>	Sarah W Gibbons Middle
<b>Zaynab Shakir</b>	The Islamic Academy for Peace
<b>Elizabeth Klein and Phelan Curry</b>	Newton Country Day School
<b>Priya Iyer</b>	Ashland Middle
<b>Pranav Nittala</b>	Oak Middle School
<b>Abigail Chen</b>	Weston Middle
<b>Andrew Zhang</b>	Raymond J Grey Junior High
<b>Manvi Rudr and Nischitha Cheeppurpalli</b>	Sarah W Gibbons Middle
<b>Koji Ohara</b>	Raymond J Grey Junior High
<b>Andrew Courville</b>	Eliot Elementary
<b>Aiden Lowe</b>	St. Francis Xavier School, Acushnet

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## Educator Excellence Award - Middle School Teacher

<b>Learning Connections Award</b>	<b>Alexis Thompson</b>	<i>Worcester East Middle School</i>
<b>Student Support Award</b>	<b>Jeremy Mularella</b>	<i>Oak Middle School</i>
<b>Program Leadership Award</b>	<b>Rebecca Sen</b>	<i>Newton Country Day School</i>