



Boston/MA Region 6 STEM Fair  
Boston/MA Region 6 High School (Senior) Division STEM Fair

Christa McAuliffe and Sanofi Grand Prize 2024 Finalist

Tim Nguyen	Leveraging Deep Learning Vision Models for Efficient Unbounded Neural Radiance Renderings	Boston Latin
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First Place Senior Division

Caroline Song	Field deployable real time natural gas leak detection	Boston Latin
Chelsea Bateman	The Efficacy of Duckweed in Mitigating Per- and Polyfluoroalkyl Substances (PFA/PFOS) on Daphnia Magna	Boston Latin
Olivia Chen	Tiny Heroes of Resilience: Revealing Tardigrade Tolerance to High Glucose for Innovative Diabetes Treatments	Boston Latin
Shuting Zhu	Gravitropism in Microgravity: Simulating the Effects of Constant Rotation on Plant Germination using Arduino Clinostat	O'Bryant School Math/Science
Yifan Evan Ding	Engineering a Termination-Readthrough-Based Gene Switch Enables Controllable CRISPR Gene Editing	Boston Latin

Second Place Senior Division

Mary Deng	Novel Multivariate Framework to Identify Oncofetal Reprogramming Genes For Targeted Cancer Therapy Discovery	Boston Latin
Qinghe Zhao	The Effect of Fire on the Amount of Chlorophyll in Pine Tree Needles	Boston Latin
Weian Xue	Effectiveness of the Traditional Chinese Medicine Fructus mume on the Inhibition of E. coli K12 Growth	Boston Latin
Yuxuan Zhang	Heavy Metal Analysis of Lichen Samples at Lower Neponset River Reveals Previously Overlooked Contamination	Boston Latin
Zachary Chen	Finding early dementia predictors: survival analysis utilizing sleep electroencephalogram and blood-based biomarkers	Boston Latin

Third Place Senior Division

Andrew Yu	Telehealth Works, But Who Does Not Benefit? A Nation-Wide Analysis	Boston Latin School
Angelina Wei	Investigating the Effects of Microplastics on E.coli Bacteria	Boston Latin
Benson Wong	Planarian Locomotion: How Scrunching Movements in Planaria are Affected by Capsaicin	Boston Latin
Iris Tian	Analyzing methane emissions from landfills based on leachate recirculation	Boston Latin
Jerry Li	Planarian Locomotion: How Scrunching Movements in Planaria are Affected by Capsaicin	Boston Latin
Leila Ohashi	Utilizing Infrared Spectroscopy to Identify the Limits of Water-Fueled Space Travel	Boston Latin



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Honorable Mention Senior Division (Projects)

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Adaeze Adiele	The Effect of Red Dye on Drosophila Fruit Flies	Boston Latin
Divine Omere	Can we combat drought with fruit peels?	O'Bryant School Math/Science
Kamiela Issa	Can we combat drought with fruit peels?	O'Bryant School Math/Science
Martin Wong	Testing the Potential Efficiency of Aerogel as a Climate Change Mitigating Material for Roofs	Boston Latin
Nicole Lin	Potential to Slow the Growth of Duckweed?	Boston Latin
QiLin Zhu	Potential to Slow the Growth of Duckweed?	Boston Latin
Victoria Liu	Potential to Slow the Growth of Duckweed?	Boston Latin
Vincent Liang	Testing the Potential Efficiency of Aerogel as a Climate Change Mitigating Material for Roofs	Boston Latin

Promising Scientist Award

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Anthony Gamarro	Temperature on Cellular respiration	East Boston High
Gian Conanan	RC Propellers	New Mission
Laurah De Almeida	Effect of Hand Cleaning on Bacterial Growth	East Boston High
Mareyli Figueroa	Effect of Hand Cleaning on Bacterial Growth	East Boston High
Matteo Baez-Giangreco	Dishwasher Residue's Effect on Liver Regeneration: Using Planaria as a Model	Boston Latin
Victor Ly	Sunbathing Bacteria	Boston Latin
Wael Idris	Dishwasher Residue's Effect on Liver Regeneration: Using Planaria as a Model	Boston Latin

AMD Engineering Excellence Award

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Caroline Song	Field deployable real time natural gas leak detection	Boston Latin
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MA Chemistry & Technology Alliance Award

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Benson Wong	Planarian Locomotion: How Scrunching Movements in Planaria are Affected by Capsaicin	Boston Latin
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Jerry Li	Planarian Locomotion: How Scrunching Movements in Planaria are Affected by Capsaicin	Boston Latin
Kamiela Issa	Can we combat drought with fruit peels?	O'Bryant School Math/Science

Massachusetts Life Science Center Award

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Chelsea Bateman	The Efficacy of Duckweed in Mitigating Per- and Polyfluoroalkyl Substances (PFA/PFOS) on Daphnia Magna	Boston Latin
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NASA Earth System Science Award

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Iris Tian	Analyzing methane emissions from landfills based on leachate recirculation	Boston Latin
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National Oceanic and Atmospheric Administration

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Yuxuan Zhang	Heavy Metal Analysis of Lichen Samples at Lower Neponset River Reveals Previously Overlooked Contamination	Boston Latin
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United States Air Force Award

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Yale Science and Engineering Association Award

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Caroline Song	Field deployable real time natural gas leak detection	Boston Latin
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RICOH Sustainable Development Award

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Olivia Chen	Tiny Heroes of Resilience: Revealing Tardigrade Tolerance to High Glucose for Innovative Diabetes Treatments	Boston Latin
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SOCIETY FOR IN VITRO BIOLOGY

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Weian Xue	Effectiveness of the Traditional Chinese Medicine Fructus mume on the Inhibition of E. coli K12 Growth	Boston Latin
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