## 2019 MASSACHUSETTS MIDDLE SCHOOL SCIENCE & ENGINEERING FAIR WINNERS

ID	Award	Names	School	Title
	Grand Prize, Cabot	Ajun Jasuja	Weston Middle School	Development of a Low Cost Portable ECG to Monitor Cardiac Function
42	Grand Prize, Cabot	Anna Du	Andover School of Montessori	Investigating a Marine Learning Based ROV to Identify Aggregation of Marine Microplastics
237	1st Place, Sanofi Genzyme	Jaeyi Song	Pierce School	Detoxifying Soil Polluted with Ice Melt Products by Using Ionic Compounds
133	1st Place, Sanofi Genzyme	Lily Honor	St. Mary's Catholic School	Traction Action
23	1st Place STEM Synergy	Jayce Lanzafame, Alyvia Bailey	Hopkins Academy	The Improved Medical IV System
171	1st Place STEM Synergy	Melissa Colella	St. Catherine of Siena Middle School	Extracting Chlorophyll
38	1st Place STEM Synergy	Ayush Gopal	Sarah W. Gibbons Middle School	Which Materials Can Best Shield Objects from Electromagnetic Radiation?
212	1st Place STEM Synergy	Ragav Iyer, Anish Kulkarni, Anagha Kulkarni	Ashland Middle School	Electro Magnetic Pod for Removing Orbiting Debris
1	1st Place. Pauline LaMarche Award	Delaney Woolbert, Julia Cressotti, Sarah Chow	Newton Country Day School	Back on Track
251	1st Place MA Chemsitry & Tech Alliance	Madeline Shea	Littleton Middle School	Ozone and Particulate Matter Detector
46	1st Place MA Chemsitry & Tech Alliance	Vikram Anantha	Jonas Clarke Middle School	MACC - My Automated Communication Companion - A Wearable Training System
31	1st Place MSEF STEM Award	Anusha Prabhakar	Saint Bernadette School	Algorithm to Detect Bipolar Attacks Through Voice Analysis
194	1st Place MSEF STEM Award	Madeline Holmes	Richmond Consolidated School	Mind Over Music
269	1st Place Cabot STEM Award	Sedef Mergen	Lesley Ellis School	What Material is Most Effective at Containing an Oceanic Oil Spill?
267	1st Place Cabot STEM Award	Natalie Kakule	Bancroft School	Harmful or Helpful?

	2nd Place.	Optical		St. Catherine of Siena	
173	Society		Niall Powers Ozyurt	Middle School	Helpful Hydrogen
	2nd Place.	Optical			
216	Society	·	Aryan Mago	Bancroft School	I've Got That Sinking Feeling
	2nd Place.	Optical			Effect of Surface Temperature on
245	Society		Brandon LaVoie	Littleton Middle School	Hovercraft Performance
	2nd Place.	Optical			
263	Society		Nora Molten, Issy Neal	Carlisle Public Schools	Water Filters For Africa
	2nd Place.	Optical			
14	Society		Daniel Nguyen	Hanover Middle School	The BLDC Motor Generator
	2nd Place.	Optical			
183	Society		Julie Alsmaan	St. Agnes School	Memories, Positive or Negative
	2nd Place.	Optical		Paul Gates Elementary	Which Cooking Oil is Best for Making
249	Society		Avanish Gowrishankar	School	Biodiesel?
	2nd Place.	Optical			
260	Society		Ankith Bharadwaj	R. J. Grey Junior High School	Breathe in! Breathe Out!
	2nd Place.	Optical			
262	Society		Philip Fonesca	English School	Plastic to the Surface
	2nd Place.	Optical			
288	Society		Katherine McDonough	Littleton Middle School	How UV Light Affects Pigments
	2nd Place.	Optical	Saad Chaudhry, Haaris		
25	Society		Ahmed	Hopkins Academy	Facial Recognition Fanbot
	2nd Place.	Optical			
54	Society	<b>A</b>	Abigail Bertocchi	Plouffe Academy	Brachistochrone
	2nd Place.	Optical			
224	Society		Anh Tran	Forest Grove Middle School	Riding Out The Wave, phase 2
~	2nd Place.	Cabot	Hailey Butler, Kaelyn	Dourno Middle School	Is Asid Dain Killing Our Fish?
9	Innovation	Ontiral	McDonough	Bourne Middle School	Is Acid Rain Killing Our Fish?
210	2nd Place. Society	Optical	Akash Cotten	Bancroft School	Killing E. coli with Household Cleaners!
218	2nd Place.	Optical			
134	Society	Optical	Vidhur Busannagari	Sharon Middle School	Underwater Data Centers-UDC
1.04					Novel and Inexpensive Machine Learning
	2nd Place.	Optical			Model to Predict Traumatic Brain Injury
284		optical	Pranav Addanki	Galvin Middle School	
284	Society		Pranav Addanki	Galvin Middle School	(ТВІ)

	2nd Place.	Optical		Andover School of	
271	Society		Heidi Siegler	Montessori	Boat Drag
	2nd Place.	Optical		St. Catherine of Siena	
61	Society		Rebecca Jeneid	Middle School	Daphnia
	2nd Place.	Optical			A Study of Protein Aggregation Using
254	Society		Ashmita Prajapati	Vassal Lane Upper School	Amino Acids
	2nd Place.	Optical			
235	Society		Elyse McManus	Bancroft School	Work It, Circuit: A Juicy Experiment
	2nd Place.	Optical		Millbury Memorial Jr/Sr High	
214	Society		Emma Hoye-Flaherty	School	Effect of Toxic Ash on Plant Growth
	2nd Place.	Optical		Millbury Memorial Jr/Sr High	Dealing With Diabetes, The Road to
208	Society		Ava Lawton	School	Developing an Artificial Pancreas
	2nd Place.	Optical			Detecting Melanoma Cancer with
283	Society		Sania Hasa	Saint Bernadette School	Artifical Intelligence
	2nd Place.	Optical	Husayn Ladha, Aidan		
30	Society		Lecrone, Zachary Krymgold	Hopkinton Middle School	Heat From The Streets!
	3rd Place MSEF	Sci			Does does the Acidity of Water Affect a
259	Tech Pearson		Manasa Rajesh	Lesley Ellis School	Plant's Growth?
	3rd Place MSEF	Sci			Does Temperature Affect a Tennis Ball's
68	Tech Pearson		Lillian Manning	St. Francis Xavier Schhol	Bounce?
	3rd Place MSEF	Sci			
168	Tech Pearson		Catherine Moriarty	St. Agnes School	Break it Down
					Does Global Warming Caused by CO2
	3rd Place MSEF	Sci		Nelson Place Elementary	(fossil fuels) Cause a Secondary
34	Tech Pearson		Maya Sushkin	School	Warming Effect?
	3rd Place MSEF	Sci			
109	Tech Pearson		Verreault Rabecca	Boston Latin School	Muscles, Is Yours Strong?
	3rd Place MSEF	Sci			
231	Tech Pearson		Aiden LaFrance	Dudley Middle School	Uno-phish-al Emails Can Reel You In!
			Anwita Revoori, Manasa		
	3rd Place MSEF	Sci	Josyula, Sairoshini		
167	Tech Pearson		Kuramthirumalai	Sharon Middle School	A Whiff of H2O
	3rd Place MSEF	Sci		Hampshire Regional Middle	
193	Tech Pearson		Kathleen Sullivan	and High School	Got Lemons?

	3rd Place MSEF	Sci	Bryson Pittenger, Anna	Groton-Dunstable Regional	
246	Tech Pearson		McKenzie	Middle School	The Effects of Exercise on the Mind
	3rd Place MSEF	Sci			How Does Precipitation & Temperature
285	Tech Pearson		Brian Tilford	Carlisle Public Schools	Affect the Dimensions of a Vernal Pond?
	3rd Place MSEF	Sci			The Effects of Antioxidants on the Heart
129	Tech Pearson		Mia Blennau	Taunton High School	Rate of Daphnia
	3rd Place MSEF	Sci			
244	Tech Pearson		Anna Augart Welwood	Lesley Ellis School	Folding Physics into Modern Medicine
	3rd Place MSEF	Sci		Michael E. Smith Middle	
22	Tech Pearson		Katherine Corriveau	School	The Kelvin Water Dropper
	3rd Place MSEF	Sci			
182	Tech Pearson		Helen Makdisi	St. Agnes School	Listen, Look, Learn!
	3rd Place MSEF	Sci			The Aerodynamics of Flat-Bottom
26	Tech Pearson		Shivani Parmar	Hopkins Academy	Airfoils
	3rd Place MSEF	Sci			Nanotechnology: Energy To Matter Using
39	Tech Pearson		Benson Chi	Oak Middle School	Sigma Bonding
	3rd Place MSEF	Sci			
184	Tech Pearson		Mia Francesconi	St. Agnes School	MIG or TIG, Which Weld is Stronger
	3rd Place MSEF	Sci			
55	Tech Pearson		Emily Woods	St. Mary's Catholic School	Bread or Bust?
	3rd Place MSEF	Sci		Pioneer Valley Chinese	
177	Tech Pearson		Alice Zhang, Mahri Hayden	Immersion Charter School	Shedding Light in Life
	3rd Place MSEF	Sci	Ryan Lovering, Patrick O'		Do different fin designs affect your
239	Tech Pearson		Rourke	Bourne Middle School	swimming speed?
	3rd Place MSEF	Sci			How Does the Viscosity of a Liquid Affect
91	Tech Pearson		Jessica Nguyen	Plouffe Academy	How Hydropower Works?
					Are Silicone Rubber Eyeglass Frames
	3rd Place MSEF	Sci			More Durable Than Currently Used
49	Tech Pearson		Mithran Wijendran	Sharon Middle School	Plastic Frames?
	3rd Place MSEF	Sci			Real-Time Motion Capture Using The
37	Tech Pearson		Nevin Thinagar	Oak Middle School	Kinect Sensor
	3rd Place MSEF	Sci		Wildwood Elementary	Evaluating the Ability of Wi-Fi Signals to
201	Tech Pearson		Mihir Shenoy	School	Penetrate Different Materials

233 Tech   3rd P   16 Tech   3rd P   4 Tech   3rd P   248 Tech   3rd P   248 Tech   3rd P   258 Tech   3rd P   258 Tech   3rd P   258 Tech   3rd P   196 Tech   3rd P   242 Tech   3rd P   242 Tech   3rd P   242 Tech   3rd P   242 Tech   3rd P   188 Tech	Place MSEF Sci ch Pearson Sci Place MSEF Sci ch Pearson Sci Place MSEF Sci ch Pearson Sci Place MSEF Sci ch Pearson Sci	Jordan Provost, Luke Lightbown, Brooke Lukasevicz Emma Doyle, Hailey Cavallo, Lauren Leong Emma Nero, Mia Iwicki Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Douglas Middle School Newton Country Day School Newton Country Day School Littleton Middle School Carlisle Public Schools St. Agnes School Newton Country Day School	Perception of Time The Great Escape Extra Help for an Extra Chromosome 21 Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not It's Written All Over Your Face
233 Tech   3rd P   16 Tech   3rd P   4 Tech   3rd P   248 Tech   3rd P   248 Tech   3rd P   258 Tech   3rd P   258 Tech   3rd P   196 Tech   3rd P   242 Tech   3rd P 3rd P   242 Tech   3rd P 3rd P   242 Tech   3rd P 3rd P   188 Tech	ch Pearson Place MSEF Sci ch Pearson	Lukasevicz Emma Doyle, Hailey Cavallo, Lauren Leong Emma Nero, Mia Iwicki Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Newton Country Day School Newton Country Day School Littleton Middle School Carlisle Public Schools St. Agnes School	The Great Escape Extra Help for an Extra Chromosome 21 Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
3rd P   16   3rd P   4   7ech   3rd P   248   7ech   3rd P   248   7ech   3rd P   258   7ech   3rd P   258   7ech   3rd P   196   7ech   3rd P   242   7ech   3rd P   242   7ech   3rd P   242   7ech   3rd P   89   7ech   3rd P   89   188   7ech	Place MSEFScich PearsonSciPlace MSEFScich PearsonSci	Emma Doyle, Hailey Cavallo, Lauren Leong Emma Nero, Mia Iwicki Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Newton Country Day School Newton Country Day School Littleton Middle School Carlisle Public Schools St. Agnes School	The Great Escape Extra Help for an Extra Chromosome 21 Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
16Tech3rd P47ech3rd P2487ech3rd P2587ech3rd P1967ech3rd P2427ech3rd P897ech3rd P891887ech	ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci	Cavallo, Lauren Leong Emma Nero, Mia Iwicki Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Newton Country Day School Littleton Middle School Carlisle Public Schools St. Agnes School	Extra Help for an Extra Chromosome 21 Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
3rd P 4 Tech 3rd P 248 Tech 3rd P 258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 89 Tech 3rd P	Place MSEFScich PearsonSciPlace MSEFScich PearsonSci	Emma Nero, Mia Iwicki Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Newton Country Day School Littleton Middle School Carlisle Public Schools St. Agnes School	Extra Help for an Extra Chromosome 21 Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
4 Tech 3rd P 248 Tech 3rd P 258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 89 Tech 3rd P	ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci	Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Littleton Middle School Carlisle Public Schools St. Agnes School	Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
3rd P 248 Tech 3rd P 258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 89 Tech 3rd P	Place MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFScich PearsonSci	Aparna Deokar Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Littleton Middle School Carlisle Public Schools St. Agnes School	Fun Fungi Tsunami Resistant House Structure Remember Me, Remember Me Not
248 Tech 3rd P 258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 89 Tech 3rd P	ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci	Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Carlisle Public Schools St. Agnes School	Tsunami Resistant House Structure Remember Me, Remember Me Not
3rd P 258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 89 Tech 3rd P	Place MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFScich PearsonSciPlace MSEFSci	Rhone-Ann Huang, Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	Carlisle Public Schools St. Agnes School	Tsunami Resistant House Structure Remember Me, Remember Me Not
258 Tech 3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 188 Tech	ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci	Margaux Angelino Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	St. Agnes School	Remember Me, Remember Me Not
3rd P 196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 188 Tech	Place MSEFScich PearsonPlace MSEFScich PearsonPlace MSEFSciPlace MSEFSci	Bélen Gálvez Lily Kennedy, Ryan Treacy, Katherine Busby	St. Agnes School	Remember Me, Remember Me Not
196 Tech 3rd P 242 Tech 3rd P 89 Tech 3rd P 188 Tech	ch Pearson Place MSEF Sci ch Pearson Place MSEF Sci	Lily Kennedy, Ryan Treacy, Katherine Busby		
3rd P 242 Tech 3rd P 89 Tech 3rd P 188 Tech	Place MSEFScich PearsonPlace MSEFSci	Lily Kennedy, Ryan Treacy, Katherine Busby		
242 Tech 3rd P 89 Tech 3rd P 188 Tech	ch Pearson Place MSEF Sci	Katherine Busby	Newton Country Day School	It's Written All Over Your Face
3rd P 89 Tech 3rd P 188 Tech	Place MSEF Sci		Newton Country Day School	It's Written All Over Your Face
89 Tech 3rd P 188 Tech		Lauren Chov, Mina Breen		
3rd P 188 Tech	ch Pearson	Lauren Chov, Mina Breen		
188 Tech		Lauren eney, wind breen	Boston Latin School	Hit refresh: productivity with exercise
	Place MSEF Sci		Hampshire Regional Middle	
3rd P	ch Pearson	Cady Spelman	and High School	The Human Blind Spot
	Place MSEF Sci			
229 Tech	ch Pearson	Rowan Baglio	Bancroft School	The Science of Spherification
3rd P	Place MSEF Sci			Minimization of Mean Incidental
11 Tech	ch Pearson	Liam Gavin	Veritas Christian Academy	Radiation in Cellular Networks
3rd P	Place MSEF Sci		St. Catherine of Siena	
18 Tech	ch Pearson	Michael King	Middle School	Waste Not Want Not
3rd P	Place MSEF Sci		Foxborough Regional Charter	
81 Tech	ch Pearson	Isabella Kievle	School	How Do Enzymes React to Temperature?
3rd P	Place MSEF Sci	Misha Mishechkin, Vishnu		
41 Tech	ch Pearson	Angirus	Oak Middle School	Fidget Spinner Boosted By Magnets
3rd P	Place MSEF Sci			
100 Tech	ch Pearson	Molly Kearney	St. Francis Xavier Schhol	Hydroponics
3rd P	Place MSEF Sci			
	ch Pearson	Joe Li	Jackson-Mann K-8 School	Bio. vs. Regular
	Place MSEF Sci			How Variations in Temperature Affect
215 Tech		Shiv Stueber	Bancroft School	Magnetic Strength

264	Honorable Mention	Aarav Mehta	Oak Meadow School	The Smart Cane
				What is the effect of increasing oxygen
145	Honorable Mention	Akalia White	Timilty Middle School	to the brain?
		Eva Routhier, Natalia		
		Salinas, Marianna		
44	Honorable Mention	Tasiopoulos	West Middle School	EasyGo on the Go
				How Does Your Tone of Voice Affect
257	Honorable Mention	Mohamed Tariq Jaffar Ali	Islamic Academy for Peace	Others Memory
				Efficiency of Batteries in
78	Honorable Mention	Laura DeMello	Bourne Middle School	Electromagnetics
		Gena Armstrong, Olivia		Can the Color of Your House Reduce Your
206	Honorable Mention	Preston	Saint Bernadette School	Energy Footprint
				Measuring the Visibility of Light using a
10	Honorable Mention	Ka'lah Rucker	John D O'Bryant School	Phone Spectrophotometer
				How does your inner body temperature
92	Honorable Mention	Thomas Craig	John D O'Bryant School	effect your digestive Enzymes
				What is the Ideal Elevation off the Sea
268	Honorable Mention	Asahel Putnam	Lesley Ellis School	Floor for a Tidal Generator?
276	Honorable Mention	Aisha Farheen	Islamic Academy for Peace	Renewable Energy from Sports
119	Honorable Mention	Violet Collier, Ellie Kiernan	Warren Prescott School	Multitasking Increases Time and Errors
		Kiran Koster, Namitha		
163	Honorable Mention	Devulapalli	Sharon Middle School	Which Water Works for Plant Life?
				What Factors Affect the Destruction of a
266	Honorable Mention	Caleb Cassio	Saint Michael School	Planet if Impacted by an Asteroid?
				What is the effect of being timed on a
141	Honorable Mention	Emily Steiner	Millis Middle School	subject's memory?
165	Honorable Mention	Jiajia Zhang	Eliot K-8 Innovation School	You Are Eating Pesticides!
				Does the Caffeine in Coffee Have Any
112	Honorable Mention	Pranesh Sivakumar	Sharon Middle School	Role in Stimulating Plant Growth?
			St. Catherine of Siena	
99	Honorable Mention	Vishal Velavan	Middle School	Hydrogen Electricity
		Courtney White, Emily		
147	Honorable Mention	Prucher	Newton Country Day School	What Will the Pill Bugs Call Home?
			Hampshire Regional Middle	
197	Honorable Mention	Abigail Thibodeau	and High School	Stressed Out - Can It Affect Your Driving

241	Honorable Mention	Tarun lyer	Sarah W. Gibbons Middle School	The Burden Bridges Bear: Finding the Ideal Ratio of Materials to Weight Capacity
169	Honorable Mention	Sydney Moriarty	St. Agnes School	Dad vs Neural Network
219	Honorable Mention	Katherine Zheng	Millbury Memorial Jr/Sr High School	Effect of Type of Plastic on The Absorbency of Dimethyl Sulfide
126	Honorable Mention	Anne Tango, Nora Grimes	Newton Country Day School	The Buzz About Stimulants
	Honorable Mention Honorable Mention	Alondra Gonzalez, Alexandra Gauthier Bhuvan Veera	Hopkins Academy West Middle School	What Does Caffeine do to Plants Enzymes of Detergents
	Honorable Mention	Hamza Mufti	Oak Middle School	When Life Gives You Lemons Clear Your Driveway
230	Honorable Mention	Ariana Sacco, Kate Wall, Caroline Ramsdell	Douglas Middle School	The Effects of Fertilization on Herbs During Drought
17	Honorable Mention	Sadee Maurice, Kendra Mahoney	Bourne Middle School	The Science Behind Facial Recognition and Facial Expression
52	Honorable Mention	Samuel Gonser	St. Catherine of Siena Middle School	Battery vs. Thermal Energy
125	Honorable Mention	Ava Monteiro	Joseph H. Martin Middle School	Storm Drains
261	Honorable Mention	Karan Rana	Locke Middle School	Improving the Efficiency of an Electrochemical Cell
32	Honorable Mention	Sahithi Pogula	Hopkinton Middle School	Align the Signs! Using Machine Learning to Forecast Heart Diseases
192	Honorable Mention	Astrid Williamson	Hopkins Academy	Color Me Rainbow
185	Honorable Mention	Elizabeth Colon-Garcia	Hampshire Regional Middle and High School	Fingerprint Analysis Between Related and Non-Related Individuals
187	Honorable Mention	Cassidy Fydenkevez, Anna Dyjack	Hopkins Academy	The Aftereffects of Chemotherapy