



58th Annual Vermont Science, Technology, Engineering and Mathematics Fair

April 1, 2017
Norwich University

Program

2017 Vermont Science, Technology, Engineering and Mathematics Fair

Schedule of Events

April 1, 2017

- 8:00-8:45 **Student registration** in main lobby of Bartoletto Hall (also called Science Building or U Building)
- 9:00-10:15 **Projects displayed** for public and judges; students should be at their posters to answer questions
- 10:15-10:45 **Break:** time for students to look at other students' posters
- 10:45-12:00 **Projects displayed** for public and judges; students should be at their posters to answer questions
- 12:00-1:30 **Lunch** in the Wise Campus Center
(lunch tickets will be available for purchase for \$9.00 during registration)
Students should take down their projects during this time
- 2:00pm **Award Ceremony** in Dole Auditorium (Webb Hall)
VSTEMF Awards
Next Generation Scholarships
VSTEMF Local Awards
National Awards
 Broadcom Masters
 I-SWEEP
 Genius Olympiad
 ISEF and ISEF affiliated awards

2017 Vermont STEM Fair Participants

First Name	Last Name	School	Title	Project ID	Room
Marley	Ackley	Milton Middle School	Ironing out Migraines	VSTEMF-CH-171	210
Marcus	Albertson	South Burlington High School	How Nanosilver Could Effect Wild Life.	VSTEMF-EV-120	145
Bitty	Alexander	Woodstock Union Jr/Sr H.S. #4	Does Mercury Concentration in Dragonfly Nymphs Correlate to Proximity to Landfills and Coal Fired Power Power Plants?	VSTEMF-EV-080	145
Hiba	Ali	Frederick Tuttle Middle School	Pumping Blood	VSTEMF-BI-134	228
Colby	Allard	Milton Middle School	The Solution to Pollution	VSTEMF-EV-168	151
Marguerite	Althoff	South Burlington High School	Classical Creatures: How Classical Music Affects Cats and Dogs	VSTEMF-BI-063	243
Gwen	Ambrose	Windsor Schools	Memory Test: Which age has the best short-term memory?	VSTEMF-SP-216	235
Grace	Ammirato	Christ The King School	Egg-cellent colors	VSTEMF-BI-106	228
Manolis	Anemikos	Milton Middle School	Sweet Methane - Effect of Sugar on Anaerobic Digestion	VSTEMF-EN-206	165
Emma	Arguin	Northfield High School	The Effect of Creative or Analytical Personality on Perception	VSTEMF-SP-127	235
Alyssa	Atwood	Northfield High School	The Effect of Dextrose on the Size and Development of Frog Embryos	VSTEMF-BI-159	228
Kassiani	Austin	Main Street Middle School	How do people remember images of positive and negative energy	VSTEMF-SP-033	235
Megan	Baechle	South Burlington High School	Will a genetically modified plant produce genetically modified vegetables?	VSTEMF-EV-053	145
Camden	Bean	Northfield High School	The Effects of Video Games on Aggression in Teens	VSTEMF-SP-152	235
Samuel	Beebe	Northfield High School	The effect of different types of milk, bacteria and rennet on the pH of and amount of curds and whey.	VSTEMF-BI-172	226
Bailey	Bergeron	Missisquoi Valley U.H.S.	The Effect Of Household Cleaners on Bacillus Cereus	VSTEMF-BI-014	243
Robert	Bettis	Missisquoi Valley U.H.S.	Pliable Bioplastic	VSTEMF-EV-023	145

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Christopher	Bialas	Frederick Tuttle Middle School	Burn it all up	VSTEMF-CH-139	210
Stephen	Bianchi	Woodstock Union Jr/Sr H.S. #4	Biomagnification of Mercury	VSTEMF-EV-083	145
Mackenzie	Biele	Woodstock Union Jr/Sr H.S. #4	How Much Bacteria is Growing on New Makeup Versus Old Makeup?	VSTEMF-BI-115	228
Morgan	Biele	Woodstock Union Jr/Sr H.S. #4	How Do Olfactory Stimulations Influence Neurological Activity, Pulse, and Emotion?	VSTEMF-BI-112	228
Lucia	Blanchard	Windsor Schools	Acoustic Affiliation	VSTEMF-SP-179	235
Alyssa	Boivin	Milton Middle School	Brush on Brush Off Bacteria	VSTEMF-BI-170	226
Emily	Bourdeau	Missisquoi Valley U.H.S.	Calf Growth Milk Replacer vs Raw Milk	VSTEMF-BI-020	243
Jenna	Bourdeau	Missisquoi Valley U.H.S.	Effectiveness of Nalidixic Acid on Inhibition of Bacterial Growth	VSTEMF-BI-016	243
Alexis	Brassard	Missisquoi Valley U.H.S.	Are Composite Faces More Attractive Than Average Faces?	VSTEMF-SP-022	235
Orionna	Britt	Frederick Tuttle Middle School	Yes Please!!	VSTEMF-SP-133	235
Mae	Browning	Main Street Middle School	Solar Power at MSMS	VSTEMF-EV-153	151
Hope	Brunet	Frederick Tuttle Middle School	Science Sparks in Soda	VSTEMF-BI-144	228
Daniel	Burns	Main Street Middle School	Which Airfoil Characteristics Make an Efficient Wing Shape?	VSTEMF-PH-047	042
Julien	Buttolph	Mater Christi School	Materials Affecting Wi-Fi Signal	VSTEMF-EN-108	160
Tyler	Cady	Frederick Tuttle Middle School	The End of the Live Lecture?	VSTEMF-SP-032	235
Caroline	Canney	St. Francis Xavier School	Eat Your Vegetables!	VSTEMF-BI-221	226
Sean	Carlson	South Burlington High School	What Size and Kind of Food Will Create the Most Biogas via Anaerobic Digestion?	VSTEMF-BI-035	243
Aidan	Carstensen	Milton Middle School	Water Distillation	VSTEMF-EN-135	160
Elijah	Cassidy	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Sabrina	Chiang	South Burlington High School	The effect of Microcystis aeruginosa on the biodiversity of zooplankton	VSTEMF-BI-090	243
Rhys	Christenson	Milton Middle School	Honey and Microbes	VSTEMF-BI-166	226
Jenna	Church	Frederick Tuttle Middle School	Yummilious	VSTEMF-CH-031	210
Tanner	Clippinger	Missisquoi Valley U.H.S.	Warped Words & The Stroop Effect	VSTEMF-SP-025	235

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First Name	Last Name	School	Title	Project ID	Room
Claire	Coates	Woodstock Union Jr/Sr H.S. #4	Is There A Correlation Between Age and the Type of Synesthesia Variation?	VSTEMF-BI-116	228
Oliver	Cochrane	Frederick Tuttle Middle School	Drink & Think	VSTEMF-SP-141	235
Peyton	Coel	South Burlington High School	Does Light Color Impact Strawberry Nutrition?	VSTEMF-BI-048	243
Cailey	Comiskey	Missisquoi Valley U.H.S.	Solubility of different over the counter pain medications	VSTEMF-BI-013	243
Justin	Conklin	South Burlington High School	Does Too Much Homework Make You Dumb?	VSTEMF-BI-148	228
Seth	Cournoyer	South Burlington High School	How does Color affect the healing process	VSTEMF-BI-119	228
Carson	Cowhig	St. Francis Xavier School	Tuning Trouble	VSTEMF-PH-228	042
Morgan	Crane	Windsor Schools	Creating the Ocean Cleanup	VSTEMF-EN-177	160
Hannah	Cunningham	South Burlington High School	How different sugars affect the health of a kombucha SCOBY	VSTEMF-BI-205	226
Jacob	Curtis	Windsor Schools	The Doctor is In! Which do you Prefer?	VSTEMF-SP-222	235
Amelia	Davis	Essex Middle School	Does the Height of the Feeder Affect the How Many Birds Visits it Gets?	VSTEMF-EV-162	151
Wolfie	Davis	Mater Christi School	Maximizing Wind Turbine Efficiency	VSTEMF-EN-100	160
Bevin	Dean	Frederick Tuttle Middle School	Battle Of The Genders.	VSTEMF-SP-175	235
Jillian	Del Trecco	Essex Middle School	Do Vermont Local Feeder Birds like Mixed Seed or Black Oil Sunflower Seed Better?	VSTEMF-EV-126	151
Hunter	Delaney	South Burlington High School	Investigating Interview Bias of Art Perception in High Schoolers	VSTEMF-SP-046	235
Brianna	Diggs	Windsor Schools	Gender Awareness Across the Education Spectrum	VSTEMF-SP-182	235
Owen	Dinklage	Mater Christi School	experimentation with evaporation	VSTEMF-CH-146	210
Paula	Donahue	Frederick Tuttle Middle School	Student Memory	VSTEMF-SP-189	235
Keller	Dorgan	Frederick Tuttle Middle School	Bacteria Battle:Dog vs. Human	VSTEMF-BI-211	226
Amy	Dragosljvich	St. Francis Xavier School	The Power of pH	VSTEMF-EV-231	151
Abbey	Duane	Woodstock Union Jr/Sr H.S. #4	Is There a Correlation Between Precipitation and Mercury Concentration in the Pouge.	VSTEMF-EV-088	145
Sierra	Duffy	South Burlington High School	Creating an Automatic Irrigation System	VSTEMF-EN-058	160

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First Name	Last Name	School	Title	Project ID	Room
Mariel	Dunn	Northfield High School	The Effect of Dextrose on the Size and Development of Frog Embryos	VSTEMF-BI-159	228
Haley	Dupont	Milton Middle School	Why Bother?	VSTEMF-SP-203	235
Ana	Dykeman	St. Francis Xavier School	Kill the Spill- Part Two!	VSTEMF-EV-227	151
Mason	Edmunds	South Burlington High School	Snowboarding Science	VSTEMF-PH-156	042
Rose-Lee	Ellis	Milton Middle School	Does music affect your mood?	VSTEMF-BI-165	226
Vera	Escaja-Heiss	South Burlington High School	How Does Growing Up Multilingual Effect Cognitive Thinking?	VSTEMF-BI-056	243
Kailei	Eustis	South Burlington High School	How Does Achilles Tendon Length Impact Jumping Performance?	VSTEMF-BI-043	243
Aaron	Evans	Missisquoi Valley U.H.S.	Photometry - Age of Star Clusters	VSTEMF-PH-011	042
Hannah	Farrell	South Burlington High School	Is There a Link Between Time and Soap on the Effectiveness of Hand Washing?	VSTEMF-BI-060	243
Savannah	Fellows	Missisquoi Valley U.H.S.	The Correlation of Coronal Mass Ejections with Solar Sunspots	VSTEMF-PH-017	042
Teaghen	Fischer	Essex Middle School	Does the Cost of Suet Impact the Number of Bird Visits?	VSTEMF-EV-125	151
Amelia	Flannigan	Essex Middle School	Do Vermont Local Feeder Birds like Mixed Seed or Black Oil Sunflower Seed Better?	VSTEMF-EV-126	151
Ethan	Flint	Missisquoi Valley U.H.S.	The Distribution of Confirmation Bias	VSTEMF-SP-010	235
Ashleigh	Forcier	St. Francis Xavier School	Steal The Steel	VSTEMF-CH-233	210
Sara	Fordham	Northfield High School	The effects of the amounts of baking soda on the amount of carbon dioxide produced when reacted with vinegar	VSTEMF-CH-122	210
Gary	Francis	Burlington Technical Center	Visual Memory of Musicians and Nonmusicians	VSTEMF-SP-178	235
Philip	Fretwell	South Burlington High School	Does Too Much Homework Make You Dumb?	VSTEMF-BI-148	228
Gabriel	Frigo	South Burlington High School	How Is Fruit Fly Reproduction Affected By CO2 Exposure	VSTEMF-BI-055	243
Hakeem	Fuad	South Burlington High School	Can Proper Filterization Revolutionize Agriculture as a Whole?	VSTEMF-EV-062	145

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Oskar	Furlan	Barstow Memorial School	Micro climate at Barstow	VSTEMF-EV-180	151
William	Gambero	Milton Middle School	Batteries and Temperature	VSTEMF-EN-184	160
Cooper	Gammon	South Burlington High School	What is The Effect of Microwave Radiation on The Growth of E.Coli?	VSTEMF-BI-034	243
Jaydenne	Garbarino	Frederick Tuttle Middle School	Science Sparks in Soda	VSTEMF-BI-144	228
Eva	Gavin	South Burlington High School	Does Climate Change Pose a Threat to Vermont's Brook Trout Populations?	VSTEMF-BI-068	243
Jacob	Gelfenbein	South Burlington High School	Zebra Mussels Filter Feeding Phosphorus out of Water	VSTEMF-BI-036	243
Dakota	Gilbert	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Dylan	Goetz	Missisquoi Valley U.H.S.	What Effects the Amount of Recoil a Shooter Feels?	VSTEMF-PH-029	042
Jack	Goga-Blanchard	South Burlington High School	Can the bacteria in biofilms build a resistance to the antimicrobials in mouthwash?	VSTEMF-BI-039	243
Cassidy	Gorrigan	St. Francis Xavier School	Trash or Treasure	VSTEMF-EN-230	165
Emma	Grasso	Milton Middle School	An Apeeling Filter?	VSTEMF-CH-196	210
Henry	Greene	Woodstock Union Jr/Sr H.S. #4	Does the level of phosphate in a body of water effect the amount of mercury in dragonfly nymphs?	VSTEMF-BI-081	243
Diana	Gregoire	South Burlington High School	Does Meditation Reduce Stress?	VSTEMF-BI-051	243
Jackson	Guernsey	Rice Memorial High School	Salvation is in the Genome: Gene therapy in an oral bacterium.	VSTEMF-BI-087	243
Christopher	Haigney	Mater Christi School	Chris's Bridge's Falling Down	VSTEMF-EN-136	160
Ellie	Haigney	Mater Christi School	Regeneration Acceleration	VSTEMF-BI-129	228
Katherine	Hall	South Burlington High School	Is Styrene Butadiene Rubber a Mutagen?	VSTEMF-BI-040	243
Taylor	Hall	Missisquoi Valley U.H.S.	Effect of Repeated Antibiotic Use on Bacillus cereus	VSTEMF-BI-026	243
Andrew	Hasselbach	Christ The King School	Black and the Beanstalk	VSTEMF-BI-104	228
Nicholas	Hasselbach	Christ The King School	Black and the Beanstalk	VSTEMF-BI-104	228

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First Name	Last Name	School	Title	Project ID	Room
Juliet	Hassenberg	Mater Christi School	Hyperaccumulators... A Solution to Lake Pollution?	VSTEMF-EV-142	151
Brandon	Hennessey	Weathersfield School	Do Pheromones Affect Decision	VSTEMF-BI-093	243
Isabella	Herrera	St. Francis Xavier School	True Potential	VSTEMF-BI-229	226
Juliana	Herrera	St. Francis Xavier School	Homeward Sound	VSTEMF-PH-234	042
Amy	Hester	St. Francis Xavier School	Hydropower	VSTEMF-EN-128	160
Blake	Heston	Woodstock Union Jr/Sr H.S. #4	How Does the Composition of a Pond's Floor Correlate with the Concentration of Mercury in Dragonfly Nymphs?	VSTEMF-EV-089	145
Elijah	Hines	South Burlington High School	How does Lysozyme Affect Bacteria Production?	VSTEMF-BI-050	243
Ethan	Hoak	Mater Christi School	Cloudy and a Chance of Energy	VSTEMF-EV-132	151
Vincent	Hoffman	Milton Middle School	The Corrosion of Different Metals	VSTEMF-CH-137	210
Lilly	Holding	Woodstock Union Jr/Sr H.S. #4	Biomagnification of Mercury	VSTEMF-EV-083	145
Hanna	Holm	Frederick Tuttle Middle School	Bacteria Baths - A study comparing the effectiveness of 3 different mouth rinses	VSTEMF-BI-078	243
Benjamin	Hood	Essex Middle School	Does the Height of the Feeder Affect the Amount of Bird Vists	VSTEMF-EV-160	151
Ethan	Hood	South Burlington High School	TFM Effects on Copepods	VSTEMF-BI-049	243
Anna	Hoppe	Essex Middle School	How Does Temperature Affect the Amount of Bird Visits in Essex, Vermont?	VSTEMF-EV-161	151
Ivy	Horner-Richardson	Windsor Schools	Preconceptions on Gender Stereotypes	VSTEMF-SP-218	235
Trevor	Houchens	South Burlington High School	Maze Solving Optimization Through Genetic Programming	VSTEMF-CS-073	042
George	Huffman	Mater Christi School	Crash Text Dummy?	VSTEMF-SP-131	235
Megan	Humphrey	Milton Middle School	Visualizing Climate Change	VSTEMF-EV-154	151
Arnel	Husrefovic	South Burlington High School	Which plant out of the sunflower, clover and alfalfa will absorb more phosphorus?	VSTEMF-BI-041	243
Abi	Jacunski	Rice Memorial High School	How To Make Your Algae Fat	VSTEMF-BI-091	243

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Lexus	Jarvis	Northfield High School	The effect of different types of milk, bacteria and rennet on the pH of and amount of curds and whey.	VSTEMF-BI-172	226
Sasha	Kagle	South Burlington High School	How Does Creativity Impact Chess Performance	VSTEMF-SP-185	235
Anna	Kaigle	Milton Middle School	ReNEWable Energy?	VSTEMF-EV-212	151
Cora	Kakalec	South Burlington High School	What is the Effect of Different Concentrations of Agricultural Runoff on the Growth of the Eurasian Watermilfoil?	VSTEMF-EV-038	145
Grace	Kelley	Missisquoi Valley U.H.S.	The Chameleon Effect	VSTEMF-SP-021	235
Jared	Kennedy	Mater Christi School	Mud is it Better than Wind, Water, and Flubber	VSTEMF-EV-130	151
Emily	King	Missisquoi Valley U.H.S.	The Effects of Phosphorous on the Growth of Cyanobacteria	VSTEMF-EV-018	145
Grace	Kinney	Missisquoi Valley U.H.S.	Which natural herbicide can kill grass most effecitvely?	VSTEMF-BI-019	243
Eliza	Kissam	Burlington Technical Center	Examining the Effect of Co-colonization of Streptococcus pneumoniae and Staphylococcus aureus on Incidences of Upper Respiratory Illness	VSTEMF-BI-169	226
Ben	Knudsen	South Burlington High School	Number and Type of Microorganisms Accumulated From Common Surfaces Based on Food Contact Time	VSTEMF-BI-042	243
Erica	Kurash	Woodstock Union Jr/Sr H.S. #4	Is the Concentration of Mercury in Dragonfly Nymphs Greater in Moving Bodies of Water or in Still Bodies of Water?	VSTEMF-EV-086	145
Abigail	Ladd	Burlington Technical Center	Correlation between Concussions to Playtime and Sports Performance	VSTEMF-BI-138	228
Paige	Langan	Weathersfield School	Harmful Hygiene	VSTEMF-BI-094	243
Cameron	Laychak	Milton Middle School	Ecosystems: How They Work?	VSTEMF-EV-199	151

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First Name	Last Name	School	Title	Project ID	Room
Grace	Leckey	South Burlington High School	Determining salt tolerances of kale, spinach, and lettuce grown in hydroponics	VSTEMF-EV-057	145
Savanah	Leduc	South Burlington High School	Gender Identification in Horses & Humans	VSTEMF-SP-158	235
Alexander	Lefebvre	South Burlington High School	Can an Aquaponic Living Machine Clean Phosphorus From Water to a WQI Standard.	VSTEMF-BI-066	243
Barbara Kate	MacMaster	Woodstock Union Jr/Sr H.S. #4	The Effects of Over the Counter Painkillers on Lemna	VSTEMF-EV-113	145
Madeleine	Magnant	Frederick Tuttle Middle School	Bach on Track: How Different Types of Music Affect Running Rates	VSTEMF-SP-075	235
Hannah	Mahar	South Burlington High School	Does Climate Change Pose a Threat to Vermont's Brook Trout Populations?	VSTEMF-BI-068	243
Olivia	Marsicovetere	Woodstock Union Jr/Sr H.S. #4	Biomagnification of Mercury	VSTEMF-EV-083	145
Jasmine	Martens	Weathersfield School	Which Hand is More Sensitive?	VSTEMF-BI-098	228
Ryan	Martin	Burlington Technical Center	Examining the Effect of Co-colonization of Streptococcus pneumoniae and Staphylococcus aureus on Incidences of Upper Respiratory Illness	VSTEMF-BI-169	226
Sierra	Matte	St. Francis Xavier School	Turn It Up	VSTEMF-BI-220	226
Travis	McAllister	Windsor Schools	Electric Toothbrush vs. Manual Toothbrush	VSTEMF-BI-215	226
Kasi	McCann	Main Street Middle School	How do people remember images of positive and negative energy	VSTEMF-SP-033	235
Jack	McGrath	Windsor Schools	Electric Toothbrush vs. Manual Toothbrush	VSTEMF-BI-215	226
Colin	McKay	South Burlington High School	Determining host range between Arabidopsis Thaliana and different strains of agrobacterium.	VSTEMF-BI-067	243
Morgan	McKeen	Weathersfield School	Harmful Hygiene	VSTEMF-BI-094	243
Rory	McMackin	South Burlington High School	The effect of environmental stress on plant stem and floral anthocyanin production	VSTEMF-BI-045	243
Keagan	McNamara	Avalon Triumvirate Academy	Magnetic Farming	VSTEMF-EV-111	145

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Emma	Mead	Frederick Tuttle Middle School	Drip, Drop, Break	VSTEMF-EN-190	165
Emma	Medor	Missisquoi Valley U.H.S.	Testing Object Resistances Using A Wheatstone Bridge Circuit	VSTEMF-PH-024	042
Maggie	Mello	Windsor Schools	A Yummy Change	VSTEMF-CH-214	210
Luke	Miklus	Essex Middle School	The Predation Relation (Comparing the population fluctuation of predator and prey)	VSTEMF-EV-163	151
Ruth	Milne	Northfield High School	The Effect of Ultra Violet Exposure on Escherichia coli Growth	VSTEMF-BI-121	228
Vincent	Moeykens	Windsor Schools	Utilizing Artificial Neural Networks in Data Analysis	VSTEMF-CS-223	042
Noorto	Mohamed	Burlington Technical Center	How does sleep affect the reaction time in teenagers?	VSTEMF-BI-186	226
Samantha	Morris	Northfield High School	The effects of the amounts of baking soda on the amount of carbon dioxed produce when reacted with vinegar	VSTEMF-CH-122	210
Daniel	Moshovetis	Milton Middle School	Perfect Free Throw	VSTEMF-PH-183	042
Belle	Moulton	Windsor Schools	Age and Everyday Stressors; Effects on Stress	VSTEMF-SP-173	235
Eric	Mowll	South Burlington High School	How does having a learning disability affect reception of lying cues and accuracy of interpreting whether someone is lying or not.	VSTEMF-SP-037	235
Eadoin	Murphy	Missisquoi Valley U.H.S.	Are hollow columns with fractal designs stronger than regular hollow columns?	VSTEMF-EN-008	160
Kate	Murphy	Weathersfield School	Does Practice Make Perfect	VSTEMF-SP-097	235
Deepika	Muthuswamy	Frederick Tuttle Middle School	Music For Your Test	VSTEMF-SP-145	235
Vishnu	Muthuswamy	South Burlington High School	The effect of soil water deficit on the growth of different natural variations of Arabidopsis thaliana in a drought environment	VSTEMF-EV-149	151

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First Name	Last Name	School	Title	Project ID	Room
Zoe	Napier	Woodstock Union Jr/Sr H.S. #4	Mercury Concentrations in Wet Deposition in Relation to Mercury Concentrations in Dragonfly Nymphs: North American Data (2013)	VSTEMF-EV-192	151
Natalie	Nichols	Weathersfield School	Does Posture Affect Participation?	VSTEMF-BI-095	243
Ann	Niekrewicz	Rice Memorial High School	Seeing the Light: Investigating the Effects of UV Radiation on Baker's Yeast	VSTEMF-BI-117	228
Chloe	Noble	Woodstock Union Jr/Sr H.S. #4	Caffeine's Effect on the Heart	VSTEMF-BI-114	228
Zachary	Noyes	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Odessa	O'Brien	South Burlington High School	Does stretching affect male and female lumbar flexibility?	VSTEMF-BI-059	243
Silas	O'Brien	Frederick Tuttle Middle School	Color Blind	VSTEMF-SP-123	235
Jon	O'Neil	South Burlington High School	Does the Size Distribution of Rainbow Smelt Populations In Lake Champlain reflect a Panmictic or Variable population?	VSTEMF-EV-065	145
Kit	Oney		Measuring Visible Light from Carbon Dots Extracted from Garlic (An Effort to Increase the Efficiency of Solar Cells)	VSTEMF-CH-028	210
Samantha	Orest	Milton Middle School	Sight and Sound: Lost and Found	VSTEMF-EN-225	165
Sami	Orest	Milton Middle School	Sight and Sound: Lost and Found	VSTEMF-EN-194	165
Izzy	Orvis	Essex Middle School	Does the Cost of Suet Impact the Number of Bird Visits?	VSTEMF-EV-125	151
Mariam	Pakbaz	Milton Middle School	Carbon Dioxide Is Affecting Our Plants	VSTEMF-BI-167	226
Nash	Pelkey	Barstow Memorial School	Micro climate at Barstow	VSTEMF-EV-180	151
Brian	Pierce	Christ The King School-Rutland	Cool Wheels	VSTEMF-EN-030	160
Will	Powell	Essex Middle School	Does the Height of the Feeder Affect the Amount of Bird Vists	VSTEMF-EV-160	151
Sam	Powers	Woodstock Union Jr/Sr H.S. #4	How Does the Composition of a Pond's Floor Correlate with the Concentration of Mercury in Dragonfly Nymphs?	VSTEMF-EV-089	145

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First Name	Last Name	School	Title	Project ID	Room
Brendan	Precourt	South Burlington High School	Mutagenicity of UV light on Yeast Growth	VSTEMF-BI-074	243
Sunthoshini	Premsankar	Williston Central School	Tending Turmeric	VSTEMF-BI-109	228
Yiren Ramon	Qu	Lyndon Institute	LiFi - Visible Light Communication System	VSTEMF-CS-027	042
Harry	Quick	South Burlington High School	The Effect of Digital Devices on Learning	VSTEMF-SP-054	235
Ellie	Quintin	Essex Middle School	Does Temperature Affect the Visits of Black-Capped Chickadees?	VSTEMF-EV-124	145
Santhosh	Rajendran	Essex High School	The Effect of Dried Zea Mays on the Purification of Different Water Conditions	VSTEMF-EV-198	151
Patrick	Renaud	Milton Middle School	Whirlwind of Change	VSTEMF-EN-207	165
Alexis	Reno	Essex Middle School	How Does Temperature Affect the Amount of Bird Visits in Essex, Vermont?	VSTEMF-EV-161	151
Magnolia	Rice	Woodstock Union Jr/Sr H.S. #4	Does the Amount of Fertilizer in Water Sources Affect the Amount of Methyl-mercury in Dragonfly Nymphs?	VSTEMF-EV-082	145
Angie	Rivers	Milton Middle School	Light's Angle of Incidence and Refraction	VSTEMF-PH-193	042
Baylee	Rock	Milton Middle School	Acid Powered Car	VSTEMF-EN-188	165
Olivia	Rooney	Rice Memorial High School	SloR Matchmaking: Investigating protein-protein interactions in an E. coli expression system.	VSTEMF-BI-147	228
Chance	Rose	Milton Middle School	Caffeine Conundrum	VSTEMF-CH-201	210
Melissa	Rosowsky	Frederick Tuttle Middle School	Necessary Ingredients in a Cookie	VSTEMF-CH-071	210
Curtis	Royston	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Finnian	Rugg	Christ The King School	Weight, is this Thing Working	VSTEMF-BI-107	228
Evelyn Ann	Rushing	Barstow Memorial School	Cold-stunned Sea Turtles and Citizen Science	VSTEMF-EV-202	151
Merle	Russell	Weathersfield School	The Messages of Water	VSTEMF-BI-096	243
Jeremy	Sabens	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Sonya	Sagan-Dworsky	Main Street Middle School	Comparing solar gain benefits of window quantity and location for houses in Vermont	VSTEMF-CS-143	042
Garrett	Sample	Essex Middle School	Does the Height of the Feeder Affect the Amount of Bird Vists	VSTEMF-EV-160	151

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Ava	Sandberg	South Burlington High School	The Effect of Nitrogen Fixing Bacteria on the Growth of Kidney Beans	VSTEMF-EV-110	145
McKenzie	Sauer	Windsor Schools	Concentration In Teenagers	VSTEMF-SP-176	235
Claudia	Schoenfeld	Frederick Tuttle Middle School	Bach on Track: How Different Types of Music Affect Running Rates	VSTEMF-SP-075	235
Eloise	Scott	Frederick Tuttle Middle School	Yes Please!!	VSTEMF-SP-133	235
Dawson	Scott-Marsh	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Ranjani	Sethuraman	Frederick Tuttle Middle School	What's The Best Insulator?	VSTEMF-EN-200	165
Sriram	Sethuraman	Frederick Tuttle Middle School	Keep the Coffee Warm	VSTEMF-EN-187	165
Savannah	Sheehan	Weathersfield School	Harmful Hygiene	VSTEMF-BI-094	243
Emily	Shimek	South Burlington High School	Food Preservation	VSTEMF-BI-181	226
Meika	Shuman	South Burlington High School	Will This New Toothpaste Decrease Gum Inflammation and Bone Destruction?	VSTEMF-BI-052	243
Ragulan	Sivakumar	South Burlington High School	the effects of task difficulty in multitasking on the processing speed of the brain	VSTEMF-SP-069	235
Philip	Skidd	Mater Christi School	Mushroom at the cafe	VSTEMF-EV-164	151
Chiara	Smith	Northfield High School	The Effect of Creative or Analytical Personality on Perception	VSTEMF-SP-127	235
Emily	Smith	Windsor Schools	The Effects of a Juice Cleanse.	VSTEMF-BI-226	226
Josie	Smith	Essex Middle School	Does Temperature Affect the Visits of Black-Capped Chickadees?	VSTEMF-EV-124	145
Maia	Smith	Northfield High School	The Effect of Video Games on a Person's Reflexes	VSTEMF-SP-210	235
Stella	Smith	Essex Middle School	Does Temperature Affect the Visits of Black-Capped Chickadees?	VSTEMF-EV-124	145
Anna	Solomon	South Burlington High School	The Relationship between Creativity and Handedness	VSTEMF-BI-155	228
Brady	Spencer	St. Francis Xavier School	Binary Task	VSTEMF-BI-235	226

2017 Vermont STEM Fair Participants

First Name	Last Name	School	Title	Project ID	Room
Alice	Sperber	Woodstock Union Jr/Sr H.S. #4	Is the Concentration of Mercury in Dragonfly Nymphs Greater in Moving Bodies of Water or in Still Bodies of Water?	VSTEMF-EV-086	145
Ella	Stainton		Rainbow Magic Emotional Math	VSTEMF-SP-079	235
Farren	Stainton		What Food do Terrestrial Isopods Prefer?	VSTEMF-BI-084	243
Brad	Stankiewicz	Milton Middle School	Got Leaks? Just Go With The Flow!	VSTEMF-EN-204	165
Brooke	Stankiewicz	Milton Middle School	Denaturation	VSTEMF-BI-191	226
Michael	Stockbridge	St. Francis Xavier School	Hot In Here	VSTEMF-EN-224	165
Ryan	Taggard	Brattleboro UHS #6	Sugar Maple Sapling Growth and Soil pH in Windham County	VSTEMF-EV-099	145
Freddie	Tagupa	Windsor Schools	Thinking Through Your Hands	VSTEMF-SP-217	235
Emily	Thomason	South Burlington High School	Classical Creatures: How Classical Music Affects Cats and Dogs	VSTEMF-BI-063	243
Logan	Thompson	Arlington School	Arlington solar project	VSTEMF-EN-009	Lobby
Brian	Thornton	Christ The King School-Rutland	Do Hand Sanitizers Effectively Kill Germs	VSTEMF-BI-077	243
Kaitlyn	Tice	Milton Middle School	Clams Vs Pollution	VSTEMF-EV-195	151
Sophia	Tommola	Christ The King School-Rutland	Life on Mars?	VSTEMF-BI-076	243
Ella	Toner	Milton Middle School	Killing That Eggsellent Bacteria	VSTEMF-BI-209	226
Matthew	Vigneau	Frederick Tuttle Middle School	The End of the Live Lecture?	VSTEMF-SP-032	235
Charlotte	Vincent	Mater Christi School	Dusting For Dollars	VSTEMF-EV-092	145
Claire	Vincent	Christ The King School	Stairmaster vs. Staircase	VSTEMF-BI-105	228
Catherine	Viner	Christ The King School	Stairmaster vs. Staircase	VSTEMF-BI-105	228
Catherine	Walcott	South Burlington High School	What factors impact memory?	VSTEMF-SP-044	235
Owen	Waligory	Milton Middle School	Lighting The Way With Pedal Power	VSTEMF-EN-197	165
Rya	Washington	Frederick Tuttle Middle School	Drip, Drop, Break	VSTEMF-EN-190	165
Samuel	Watson	Main Street Middle School	Why do such strict rules have to be adhered to when making yogurt?	VSTEMF-BI-236	226
Ellie	Weimer	Essex Middle School	Does the Cost of Suet Impact the Number of Bird Visits?	VSTEMF-EV-125	151
Addison	White	South Burlington High School	Mass Hysteria and Fake News	VSTEMF-SP-157	235

2017 Vermont STEM Fair Participants

First Name	Last Name	School	Title	Project ID	Room
Makayla	White	Frederick Tuttle Middle School	Yummilicious	VSTEMF-CH-031	210
Chase	Wiegers	Christ The King School-Rutland	Which Popcorn Brand Pops the Most	VSTEMF-BI-085	243
Erin	Wierzbicki	Windsor Schools	Nomophobia	VSTEMF-SP-174	235
Madison	Williams	Windsor Schools	Memory Test: Which age has the best short-term memory?	VSTEMF-SP-216	235
Ann	Wong	South Burlington High School	The Connection Between a Tumor Suppressor and Tumor Blood Vessels in Ovarian Cancer	VSTEMF-BI-070	243
Mairsa	Wood	Essex Middle School	Does the Height of the Feeder Affect the How Many Birds Visits it Gets?	VSTEMF-EV-162	151
Adele	Woodard	Burlington Technical Center	The Effect of False Positives on Consumers	VSTEMF-MA-213	042
Kailey	Yang	South Burlington High School	How Does Stress Affect Short-Term Memory?	VSTEMF-SP-061	235
Sami	Yates	Woodstock Union Jr/Sr H.S. #4	Does Mercury Concentration in Dragonfly Nymphs Correlate to Proximity to Landfills and Coal Fired Power Power Plants?	VSTEMF-EV-080	145
Tenzin	Yeshi	Frederick Tuttle Middle School	An Airplane's Fastest Weight Loser.	VSTEMF-EN-140	160
Jack	Zagursky	South Burlington High School	Ideal Pasture Plants to Optimize Rotational Grazing	VSTEMF-BI-064	243
Larissa	Zierak	St. Francis Xavier School	Save It For Later	VSTEMF-EV-232	151
Sally	Zuk	St. Francis Xavier School	Reaction's Fast Action	VSTEMF-CH-219	210

The VSTEMF is an all-volunteer organization. Over 80% of the funds raised annually go to students and their teachers, providing cash prizes and covering the costs of trips to competitions beyond Vermont. The remainder goes to operating costs. The money raised comes from 49 sponsoring partners throughout Vermont who provide gifts or grants from \$50-\$5000. We also have judges from over 50 STEM partners in academia, industry and professional organizations. In short, we have over 100 Vermont-based partners that share our vision and join us to make the VSTEMF a huge success.

The following lists the Vermont stakeholders who, as partners and sponsors, understand the value of investing in Vermont's future scientists!

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Renewable NRG Systems, Hinesburg
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TCORP, Colchester
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Vermont Organization of Nurse Leaders, Montpelier

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Castleton University, Castleton	Saint Michael's College, Colchester
Green Mountain College, Poultney	Vermont Technical College, Randolph Center
Norwich University, Northfield	

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Middlebury College, Middlebury
Norwich University, Northfield
University of Vermont, Burlington
St. Michael's College, Colchester
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Vermont STEM State and Federal Government Partners

Fish and Wildlife/Agency of Natural Resources
US Navy
US Air Force

Vermont STEM Industry Partners

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BlueCross, BlueShield of Vermont, Berlin
Carbon Catalyst, Burlington
Central Vermont Medical Center, Berlin
D. E. W. Construction Corporation
GlobalFoundries, Essex Junction
Hughlett Technical Services, Waterbury
Island Innovations, Grand Isle
LORD Corporation- Microstrain, Williston
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Cabot Creamery Coop, Cabot
Eagle Hill Foundation, Steuben, ME

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Green Mountain Water Environment Association
Northeast Branch, American Society for Microbiology
Society of Women Engineers, North Country Section
Tau Beta Pi, Engineering Honor Society, Norwich University Chapter
Vermont Academy of Arts and Sciences
Vermont Chapter of Sigma Xi
Vermont Organization of Nurse Leaders
Vermont Academy of Science and Engineering
Vermont Astronomical Society
Vermont Genetics Network Outreach

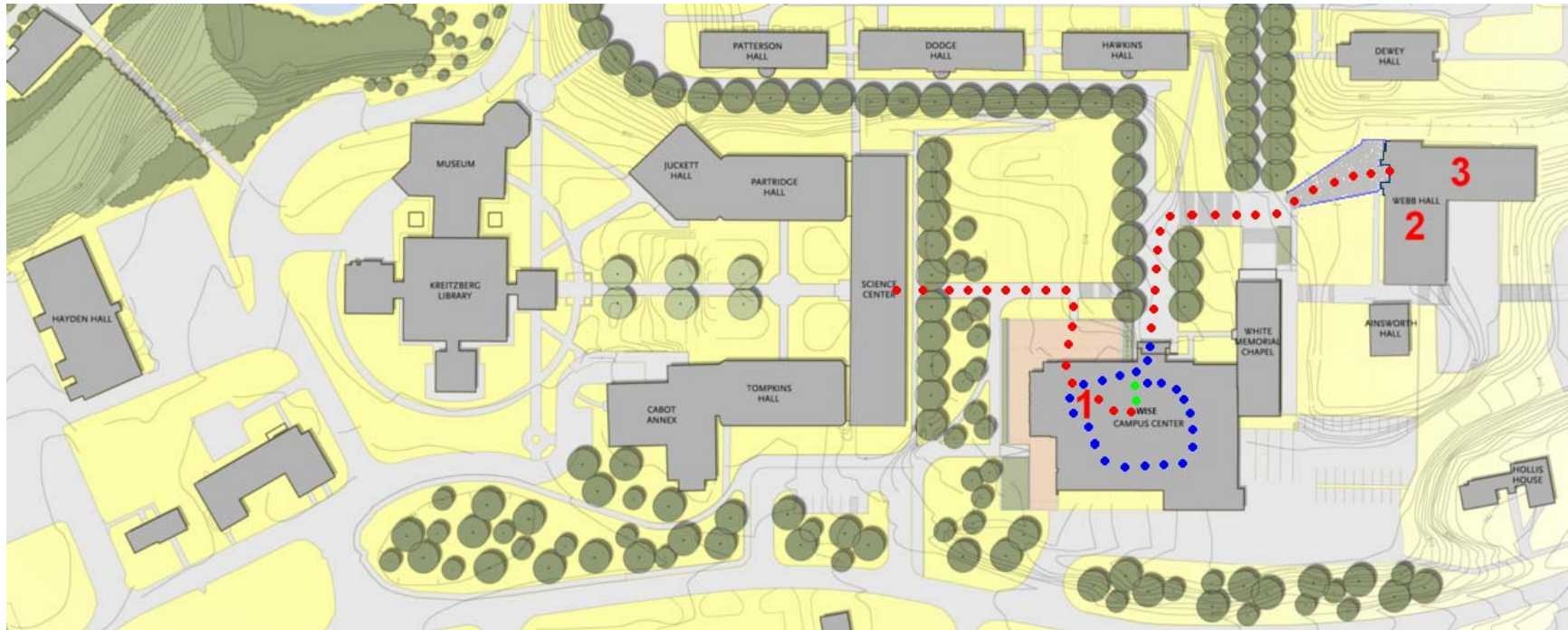
Parking Map



- Vehicular Traffic
- Student, Parent, Teacher Foot Traffic
- Judge Foot Traffic

- 1 Reserved Parking for VSSMF (all day)
- 2 Project Registration
- 3 Directions to Project Rooms
- 4 Judges' Meeting Rooms

Vermont STEM Fair Buildings



- 1** Wise Campus Center with Food Court
- 2** Webb Hall
- 3** Dole Auditorium (award ceremony)

- Outside or on first floor of building
- Up stairs
- Inside on second floor of building