

2013 Intel NWSE Middle School Awards

These awards were given March 22, 2013 to our middle school participants.

Best of Fair winners are sponsored by Mike and Elaine Sawyer, each student receives a plaque and \$100.

Exhibit number	Project title	Student	School	Adult Sponsor
MS-AM-0001	The Many Colors of Pisaster: A study of the Polymorphic Color Plasticity of the Ochre Sea Star, <i>Pisaster ochraceus</i>	Cole Fuller	Bend Science Station	Danny Martin
MS-EA-0017	Electrifying Earthquakes	Theresa D'Silva	Summa Stoller	Pam Svenson

Special Awards

Special Award	Award Sponsor	Exhibit No	Title	Student List	Organization	Adult Sponsor
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-AM-0069	Microbes from Money	Kaden Profit	Rachel Carson Environmental Middle School	Rebecca Hall
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-BE-0069	The Effects of Extrinsic Motivation	Kathleen Benner	Summa Meadow	Susan Duncan
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-EV-0047	Survival of the Plants	Zack Pelster, Jake Bailey	Visitation School	Mrs. Carol Funk
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-PM-0007	GOING BALLISTIC! The Surprising Relationship of Reservoir Volume to Barrel Length and Reservoir Pressure in a Homemade Air Cannon	Joshua Wentzel	Winterhaven Middle School	Wendy Archibald
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-PM-0023	Sound Bites	Nabeeha Tahseen	Oregon Islamic Academy	Sahar Bassyouni
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-BE-0079	Performance impact on high school wrestlers from cutting weight.	Ruchi Vora	Stoller Middle School	Christina Slater
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-EG-0067	Syringe Powered Robotic Arm	Alden Battaglia, Aditya Sharoff	Meadow Park Middle School	Tiffany Tranparta
Army Outstanding Middle School Project	Army Research Office, U.S. Army	MS-AM-0092	Which Will Cause a Higher Rate of Gain, Corn or Barley	Nicholas Sheridan	Yamhill Carlton School District	Lisa Jacobs

Broadcom MASTERS nomination	Society for Science and the Public	MS-BE-0081	Autism and Gender	Elise Kuechle	Rachel Carson Environmental Middle School	Rebecca Hall
Broadcom MASTERS nomination	Society for Science and the Public	MS-AM-0046	Proteomic Analysis of Tardigrades Exposed to Harsh Environments	Kian Patton	Summa Meadow	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	MS-EG-0046	Novel Synthesis of Copper Nanowires	Nikhil Murthy	Summa Meadow	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	MS-MC-0011	Search Time of Search and Rescue Tactics	Keizo Morgan	Summa Meadow	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	MS-ME-0033	The Test of Thyme	Joan Hady	Summa Meadow	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	MS-CH-0053	The Truth Behind the Alloy	Kiernan Hundis	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	MS-EA-0013	Cosmic Ray Detection with an Isopropanol Cloud Chamber	Benjamin Lee	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	MS-PL-0028	Photosynthesis Rates of Common Northwest Weeds	Katherine Renner	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	MS-PL-0029	A Thorny Issue	Lian Prost-Hughart	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	MS-PM-0024	Earbuds vs. Headphones	Duncan Gates	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	MS-CP-0041	What Drink Should Go Down The Sink?	Iesha Comia, Clara Ganz	St. Pius X School	Teresa Sebert
Broadcom MASTERS nomination	Society for Science and the Public	MS-PM-0007	GOING BALLISTIC! The Surprising Relationship of Reservoir Volume to Barrel Length and Reservoir Pressure in a Homemade Air Cannon	Joshua Wentzel	Winterhaven Middle School	Wendy Archibald
Broadcom MASTERS nomination	Society for Science and the Public	MS-AM-0048	Extracting Cellulase from Soil Fungi to Produce Cellulosic Ethanol	Nicholas Liskij	Summa Whitford	Carolee Dearborn
Broadcom MASTERS nomination	Society for Science and the Public	MS-ET-0026	The Effect the Ratio of Structural Carbohydrates to Nonstructural Carbohydrates has on the Efficiency of Anaerobic Digestion	Jakob Hollenbeck	Summa Whitford	Carolee Dearborn
Broadcom MASTERS nomination	Society for Science and the Public	MS-EA-0009	Dead Zones	Haley Rice	Summa Whitford	Carolee Dearborn

Broadcom MASTERS nomination	Society for Science and the Public	MS-AM-0001	The Many Colors of Pisaster: A study of the Polymorphic Color Plasticity of the Ochre Sea Star, <i>Pisaster ochraceus</i>	Cole Fuller	Bend Science Station	Danny Martin
Broadcom MASTERS nomination	Society for Science and the Public	MS-EV-0001	The Impact of Temperature on Phytoplankton density in Blue Lake	Aneesh Mysore	Stoller Middle School	Laura Burger
Broadcom MASTERS nomination	Society for Science and the Public	MS-ET-0014	Design of a System to Recapture Wasted Heat	Pushkar Shinde	Oregon Episcopal Middle School	Anna Rozzi
Broadcom MASTERS nomination	Society for Science and the Public	MS-ME-0046	Is Everyone Really a Stranger?	Grant Grainger	Cascade Heights Public Charter School	Georgi Brunning
Broadcom MASTERS nomination	Society for Science and the Public	MS-CH-0023	The Reverse Effects of Ammonium Perchlorate Using Curcuma Longa (Turmeric)	Shiva Bharadwaj, Alex Finley	Oregon Episcopal Middle School	Ryan Holland
Broadcom MASTERS nomination	Society for Science and the Public	MS-AM-0018	Peppers Pungency's affect on Inhibition Bacterial Growth	Kate Keeney, Ruby Aaron	Oregon Episcopal Middle School	Christopher Mader
Broadcom MASTERS nomination	Society for Science and the Public	MS-CP-0001	School Lunch	Molly Stadel, Hannah Munson, Leah Doeden	Mark Twain Middle School	Daniel Jamsa
Broadcom MASTERS nomination	Society for Science and the Public	MS-EA-0017	Electrifying Earthquakes	Theresa D'Silva	Summa Stoller	Pam Svenson
Broadcom MASTERS nomination	Society for Science and the Public	MS-ET-0037	The Good, The Bad and The Blind.	Angela Jiang	Summa Stoller	Pam Svenson
Broadcom MASTERS nomination	Society for Science and the Public	MS-BE-0091	Timbre's Effect on Pitch Perception	Amelia Jamond	Robert Gray Middle School	Katy Wagner-west
Broadcom MASTERS nomination	Society for Science and the Public	MS-MC-0015	Length of Time to Find Primes Below n	Nathan Jewell	Robert Gray Middle School	Katy Wagner-west
Broadcom MASTERS nomination	Society for Science and the Public	MS-BE-0079	Performance impact on high school wrestlers from cutting weight.	Ruchi Vora	Stoller Middle School	Christina Slater
Broadcom MASTERS nomination	Society for Science and the Public	MS-ET-0038	Designing Low-Cost Microbial Fuel Cells (MFCs) Using Household Materials	Srikar Tallapragada	Stoller Middle School	Christina Slater
Broadcom MASTERS nomination	Society for Science and the Public	MS-PE-0018	Implementing Hall Effect Technologies and Applications	Yesh Godse	Stoller Middle School	Christina Slater

Broadcom MASTERS nomination	Society for Science and the Public	MS-EV-0055	A Novel CO2 Sequestration System	Nandini Naidu	Valley Catholic Middle School	Sarah Zinzer
Broadcom MASTERS nomination	Society for Science and the Public	MS-CP-0029	Nutritional Natural Sweeteners? A Novel View Through Glucose Measurement	Lucy Cummins	Summa Stoller	Nick Badyrka
Broadcom MASTERS nomination	Society for Science and the Public	MS-MC-0013	Counting Complex Shapes Using Morphological Operations	Mahita Tovinkere	Summa Stoller	Nick Badyrka
Broadcom MASTERS nomination	Society for Science and the Public	MS-PM-0033	A Study of Randomly Packed, Aspherical Objects	Priyansh Sharma	Summa Stoller	Nick Badyrka
Broadcom MASTERS nomination	Society for Science and the Public	MS-CH-0086	The Impact of Color of Foods on Daily Nutrition intake as measured by the ability to meet RDA	Shayla Rao	West Sylvan Middle School	Aru Rao
Broadcom MASTERS nomination	Society for Science and the Public	MS-ET-0018	Taking the Shine Outside, Inside	Kyla Wiegand	Wood Middle School	Jennifer Stout
Broadcom MASTERS nomination	Society for Science and the Public	MS-PE-0031	Identifying Whether or not a Galactic Collision will Form a Supermassive Black Hole	Kira Emery	Lighthouse School	Nicholas Asay
Broadcom MASTERS nomination	Society for Science and the Public	MS-EG-0056	Designing a Touch-Free Interface	Kaitee Steiert	Whitford Middle School	John Leitner
Broadcom MASTERS nomination	Society for Science and the Public	MS-CH-0057	Ethanol - What's in your car?	Harshita Narayanan	Stoller Middle School	John WickhamSr.
Broadcom MASTERS nomination	Society for Science and the Public	MS-EG-0060	An Innovative Method to Improve Lighting Systems by Using Retractable and Programmable Multi-Color LEDs	Ashwin Datta	Evergreen Middle School	Jessie Bader
Broadcom MASTERS nomination	Society for Science and the Public	MS-CH-0064	Cost-Effective and Efficient Catalysis in Enzymatic Fuel Cells: Applied Polymeric Structures and Compatible Enzymes to Increase Efficiency of Electron Transfer	Arnob Das	Summa Stoller	Todd Freiboth
Broadcom MASTERS nomination	Society for Science and the Public	MS-ME-0043	Early Detection of Malignant Solitary Pulmonary Nodules (SPNS) Using a Computer Diagnostic and Automatic Screening Tool	Aditya Jain	Summa Stoller	Todd Freiboth
Broadcom MASTERS nomination	Society for Science and the Public	MS-PE-0022	Solar Energy Utilization with Closed Loop Systems	Shahir Rahman	Summa Stoller	Todd Freiboth

Broadcom MASTERS nomination	Society for Science and the Public	MS-PL-0037	Examining the effect of varying dye type and color on performance and efficiency of dye sensitized solar cells	Arjun Somayazulu	Summa Stoller	Todd Freiboth
Broadcom MASTERS nomination	Society for Science and the Public	MS-EG-0075	The Search for the Perfect DNA Extraction: Testing to Extract DNA from Bananas in the Home or Classroom	Katherine Oppenheimer	Touchstone School	Dr.Lillian Oppenheimer
IEEE Special Awards	IEEE Oregon	MS-EG-0042	Kick2light Soccer Ball	Emma Rosicky	Summa Whitford	Carolee Dearborn
IEEE Special Awards	IEEE Oregon	MS-MC-0013	Counting Complex Shapes Using Morphological Operations	Mahita Tovinkere	Summa Stoller	Nick Badyrka
IEEE Special Awards	IEEE Oregon	MS-CH-0085	Fruit For Renewable Energy?	Orion Kohles, Peter Fink	Hosford Middle School	Patrick Mangan
Innovative Engineering Award	National Society of Professional Engineers	MS-ET-0027	bioluminescence and solar panels	Amulya Prabhala	Summa Whitford	Carolee Dearborn
Mu Alpha Theta Award	Mu Alpha Theta	MS-MC-0006	Comparing Patterns Between Classical and Classic Ragtime Music	Andrea Russell	Cascade Heights Public Charter School	Georgi Brunning
Mu Alpha Theta Award	Mu Alpha Theta	MS-MC-0015	Length of Time to Find Primes Below n	Nathan Jewell	Robert Gray Middle School	Katy Wagner-west
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	MS-EV-0051	Pesticides' Effect on Stream Health	Peyton Tierney	Rachel Carson Environmental Middle School	Rebecca Hall
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	MS-CP-0007	Barnacles be Gone! How Do Different Liquid Treatments Affect Barnacle Adhesion?	Elliott Nye, Aidan White	Oregon Episcopal Middle School	Anna Rozzi
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	MS-CP-0003	Nail Polish Durability	Elsa King, Amanda Bays	Cascade Heights Public Charter School	Georgi Brunning
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	MS-EG-0068	Hydraulic Arm	Lauren Macdonald, Allyssa Delurey, Amy Simmons	Meadow Park Middle School	Tiffany Tranparta
Naval Excellence in Science and	US Navy & USMC	MS-EV-0051	Pesticides' Effect on Stream Health	Peyton Tierney	Rachel Carson Environmental Middle School	Rebecca Hall

Engineering Award						
Naval Excellence in Science and Engineering Award	US Navy & USMC	MS-CP-0007	Barnacles be Gone! How Do Different Liquid Treatments Affect Barnacle Adhesion?	Elliott Nye, Aidan White	Oregon Episcopal Middle School	Anna Rozzi
Naval Excellence in Science and Engineering Award	US Navy & USMC	MS-CP-0003	Nail Polish Durability	Elsa King, Amanda Bays	Cascade Heights Public Charter School	Georgi Brunning
Naval Excellence in Science and Engineering Award	US Navy & USMC	MS-EG-0068	Hydraulic Arm	Lauren Macdonald, Allyssa Delurey, Amy Simmons	Meadow Park Middle School	Tiffany Tranparta
Outstanding Air Quality Project	Southwest Clean Air Agency	MS-EV-0037	Volatile Organic Compounds in Indoor Air	Brad Subramaniam	Summa Whitford	Carolee Dearborn
Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	MS-EV-0049	Where'd All the Frogs Go?	Taylor Overn	Stoller Middle School	Christina Slater
Outstanding Geoscience Project	Association Of Women Geoscientists	MS-EA-0017	Electrifying Earthquakes	Theresa D'Silva	Summa Stoller	Pam Svenson
Outstanding Natural Resources Science Project	Pacific NW Research Station, USDA Forest Service	MS-PL-0029	A Thorny Issue	Lian Prost-Hughart	ACCESS	Alfonso Garcia Arriola
Outstanding Project by a 5th Grade Student	Pacific NW Society for Coating Technology	MS-CH-0047	Experimenting in the world of polymers	Clare Hart	Bridlemile Elementary School	Larry Sherman
Outstanding Project by a 5th Grade Student	Pacific NW Society for Coating Technology	MS-AM-0041	The angle that geese fly	Robert Menezes	Bridlemile Elementary School	Larry Sherman
Outstanding Project by a 5th Grade Student	Pacific NW Society for Coating Technology	MS-EV-0070	Acid Showers Bring No Flowers	Anwasha Mukherjee	Class Academy	Jaime Mitchell
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	MS-EA-0008	The Acid Ocean: How Humans' CO2 Emissions Affect Marine Life	Andrea Bian	Summa Whitford	Carolee Dearborn
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	MS-EV-0055	A Novel CO2 Sequestration System	Nandini Naidu	Valley Catholic Middle School	Sarah Zinzer

Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	MS-EV-0070	Acid Showers Bring No Flowers	Anwasha Mukherjee	Class Academy	Jaime Mitchell
Outstanding Project in Water Quality	U.S. Geological Survey, Oregon Water Science Center	MS-EA-0003	Erosion Control	Jocelyn Brown, Melly Kazel, Hannah Daly	Mark Twain Middle School	Daniel Jamsa
Outstanding Project Related to Energy Management and Sustainability	Association of Energy Engineers	MS-ET-0026	The Effect the Ratio of Structural Carbohydrates to Nonstructural Carbohydrates has on the Efficiency of Anaerobic Digestion	Jakob Hollenbeck	Summa Whitford	Carolee Dearborn
Outstanding Project Related to Energy Management and Sustainability	Association of Energy Engineers	MS-ET-0014	Design of a System to Recapture Wasted Heat	Pushkar Shinde	Oregon Episcopal Middle School	Anna Rozzi
Outstanding Research in Psychology	American Psychological Association	MS-BE-0081	Autism and Gender	Elise Kuechle	Rachel Carson Environmental Middle School	Rebecca Hall
Outstanding Research in Psychology	American Psychological Association	MS-BE-0091	Timbre's Effect on Pitch Perception	Amelia Jamond	Robert Gray Middle School	Katy Wagner-west
Outstanding Research in Psychology	American Psychological Association	MS-BE-0079	Performance impact on high school wrestlers from cutting weight.	Ruchi Vora	Stoller Middle School	Christina Slater
Outstanding Science or Engineering Project	U.S. Air Force	MS-PM-0017	Forces of Flight	Declan Skinner	Bridlemile Elementary School	Larry Sherman
Outstanding Science or Engineering Project	U.S. Air Force	MS-AM-0041	The angle that geese fly	Robert Menezes	Bridlemile Elementary School	Larry Sherman
Outstanding Science or Engineering Project	U.S. Air Force	MS-CH-0053	The Truth Behind the Alloy	Kiernan Hundis	ACCESS	Alfonso Garcia Arriola
Outstanding Use of the International System of Units	U.S. Metric Association	MS-EV-0051	Pesticides' Effect on Stream Health	Peyton Tierney	Rachel Carson Environmental Middle School	Rebecca Hall
Outstanding Use of the International System of Units	U.S. Metric Association	MS-EG-0024	Jack it Up	Beau Griffith	Portland Lutheran School	Kieffer Tarbell
Outstanding Use of the International System of Units	U.S. Metric Association	MS-MC-0014	Egg Volumes	Jesse Cook	Highland Park Middle School	Karen Nelson

Outstanding Use of the International System of Units	U.S. Metric Association	MS-EA-0018	Landslides	Colton Morgan	Stoller Middle School	Christina Slater
Outstanding Use of the International System of Units	U.S. Metric Association	MS-PE-0018	Implementing Hall Effect Technologies and Applications	Yesh Godse	Stoller Middle School	Christina Slater
Project Best Illustrating Surgeon General's Health Recommendations	U.S. Public Health Service	MS-ME-0049	7,000 Chemicals	Sophia Shotola, Jensyn Stanger	Yamhill Carlton School District	Lisa Jacobs
Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	MS-EA-0009	Dead Zones	Haley Rice	Summa Whitford	Carolee Dearborn
Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	MS-EV-0057	Protein Skimmers and Phosphate Removal in Marine Aquatic Systems	Kamran Walsh	Summa Stoller	Nick Badyrka
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	MS-PL-0028	Photosynthesis Rates of Common Northwest Weeds	Katherine Renner	ACCESS	Alfonso Garcia Arriola
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	MS-PM-0003	A Better Bat For The World	Brice Shippen, Andy Dummer	Mark Twain Middle School	Daniel Jamsa
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	MS-EV-0057	Protein Skimmers and Phosphate Removal in Marine Aquatic Systems	Kamran Walsh	Summa Stoller	Nick Badyrka
Water Prize Award of Excellence	Water Environment Federation	MS-EV-0051	Pesticides' Effect on Stream Health	Peyton Tierney	Rachel Carson Environmental Middle School	Rebecca Hall
Water Prize Award of Excellence	Water Environment Federation	MS-EV-0068	Daphnia as a water quality indicator	Riley Knowles, Samantha Reed	Athey Creek Middle School	Stephen Walsh
Water Prize Award of Excellence	Water Environment Federation	MS-CP-0048	Filter Efficacy	Morgan Mankin, Dana Lambert	Athey Creek Middle School	Stephen Walsh
Water Prize Award of Excellence	Water Environment Federation	MS-EV-0041	Optimal remediation techniques for crude oil spills	Kendra Ogden, Beth Hoots, Vehba Deshiikan	Athey Creek Middle School	Stephen Walsh
Water Prize Award of Excellence	Water Environment Federation	MS-EG-0079	Water Quality of Various Sources	Lillie Elkins, Evy Black	Athey Creek Middle School	Stephen Walsh

Category Awards

Category	Place	Exhibit No	Title	Student List	Organization	Adult Sponsor
Animal Science and Microbiology	First Place	MS-AM-0048	Extracting Cellulase from Soil Fungi to Produce Cellulosic Ethanol	Nicholas Liskij	Summa Whitford	Carolee Dearborn
Animal Science and Microbiology	First Place Tie	MS-AM-0001	The Many Colors of Pisaster: A study of the Polymorphic Color Plasticity of the Ochre Sea Star, <i>Pisaster ochraceus</i>	Cole Fuller	Bend Science Station	Danny Martin
Animal Science and Microbiology	Second Place	MS-AM-0018	Peppers Pungency's affect on Inhibition Bacterial Growth	Kate Keeney, Ruby Aaron	Oregon Episcopal Middle School	Christopher Mader
Animal Science and Microbiology	Second Place Tie	MS-AM-0046	Proteomic Analysis of Tardigrades Exposed to Harsh Environments	Kian Patton	Summa Meadow	Susan Duncan
Animal Science and Microbiology	Third Place	MS-AM-0016	EMR	Julia Rehmann	Winterhaven Middle School	Tom Bright
Animal Science and Microbiology	Third Place Tie	MS-AM-0043	The Daphnia Survival Project	Calder Moon, Jack Bocci	Bridlemile Elementary School	Larry Sherman
Animal Science and Microbiology	Honorable Mention	MS-AM-0044	How well do cleaning products work as antibacterials?	Zane Stallcup	Rosemont Ridge Middle School	Jessamyn Van Hook
Animal Science and Microbiology	Honorable Mention	MS-AM-0062	Light Night Attraction	Nate Wessels, Francis Duyck	Visitation School	Mrs. Carol Funk
Animal Science and Microbiology	Honorable Mention	MS-AM-0041	The angle that geese fly	Robert Menezes	Bridlemile Elementary School	Larry Sherman
Animal Science and Microbiology	Honorable Mention	MS-AM-0077	A Spice to Make Your Kidneys Nice: The Role of Herbs in Kidney Dialysis	Akhila Kandaswamy	Summa Stoller	Todd Freiboth
Animal Science and Microbiology	Honorable Mention	MS-AM-0070	Best Worm for Vermicomposting	Eudie Goganian	Rachel Carson Environmental Middle School	Rebecca Hall
Animal Science and Microbiology	Honorable Mention	MS-AM-0034	Elephant Behavior	David Rockow	Leslie Middle School	Michael Rockow
Behavioral and Social Science	First Place	MS-BE-0079	Performance impact on high school wrestlers from cutting weight.	Ruchi Vora	Stoller Middle School	Christina Slater
Behavioral and Social Science	Second Place	MS-BE-0091	Timbre's Effect on Pitch Perception	Amelia Jamond	Robert Gray Middle School	Katy Wagner-west
Behavioral and Social Science	Third Place	MS-BE-0081	Autism and Gender	Elise Kuechle	Rachel Carson Environmental Middle School	Rebecca Hall

Behavioral and Social Science	Honorable Mention	MS-BE-0071	Personal Bubble: Does Race, Ethnicity, and Gender Affect the Size of One's Personal Bubble?	Ihsaan Ali	Islamic School of Portland	Nura Elmagbari
Behavioral and Social Science	Honorable Mention	MS-BE-0033	Minus 1, Plus 2: How Hearing Deprivation May Improve Visual Learning	Fetheya Alattar	Baker Web Academy	Manar Alattar
Behavioral and Social Science	Honorable Mention	MS-BE-0090	Do Cats Have a Dominant Paw?	Emily Walters	Robert Gray Middle School	Katy Wagner-west
Behavioral and Social Science	Honorable Mention	MS-BE-0082	Lego Logic	Christa Gilray	Rachel Carson Environmental Middle School	Rebecca Hall
Behavioral and Social Science	Honorable Mention	MS-BE-0045	Homework: Helpful or Hurtful?	John Kim, Brandon Kyung	Wood Middle School	Jennifer Stout
Chemistry	First Place	MS-CH-0064	Cost-Effective and Efficient Catalysis in Enzymatic Fuel Cells: Applied Polymeric Structures and Compatible Enzymes to Increase Efficiency of Electron Transfer	Arnob Das	Summa Stoller	Todd Freiboth
Chemistry	Second Place	MS-CH-0023	The Reverse Effects of Ammonium Perchlorate Using Curcuma Longa (Turmeric)	Shiva Bharadwaj, Alex Finley	Oregon Episcopal Middle School	Ryan Holland
Chemistry	Second Place Tie	MS-CH-0057	Ethanol - What's in your car?	Harshita Narayanan	Stoller Middle School	John WickhamSr.
Chemistry	Third Place	MS-CH-0053	The Truth Behind the Alloy	Kiernan Hundis	ACCESS	Alfonso Garcia Arriola
Chemistry	Third Place Tie	MS-CH-0086	The Impact of Color of Foods on Daily Nutrition intake as measured by the ability to meet RDA	Shayla Rao	West Sylvan Middle School	Aru Rao
Chemistry	Honorable Mention	MS-CH-0029	Take the Cake	Griffin Walth	Winterhaven Middle School	Wendy Archibald
Chemistry	Honorable Mention	MS-CH-0047	Experimenting in the world of polymers	Clare Hart	Bridlemile Elementary School	Larry Sherman
Chemistry	Honorable Mention	MS-CH-0056	Recharge My Batteries	James Chen, Darien Brown, Andrew Lor	Leslie Middle School	Michael Rockow
Chemistry	Honorable Mention	MS-CH-0072	Gum and Chocolate?	Marleigh Dunning, Jessica Whitticar	Cascades Academy of Central Oregon	Anne-Marie Eklund

Chemistry	Honorable Mention	MS-CH-0067	Hard Boiled Liquids	Brynn Zellmer	Highland Park Summa Program	Sarah Weller
Consumer Products Testing	First Place	MS-CP-0029	Nutritional Natural Sweeteners? A Novel View Through Glucose Measurement	Lucy Cummins	Summa Stoller	Nick Badyrka
Consumer Products Testing	Second Place	MS-CP-0041	What Drink Should Go Down The Sink?	Iesha Comia, Clara Ganz	St. Pius X School	Teresa Sebert
Consumer Products Testing	Third Place	MS-CP-0001	School Lunch	Molly Stadel, Hannah Munson, Leah Doeden	Mark Twain Middle School	Daniel Jamsa
Consumer Products Testing	Honorable Mention	MS-CP-0007	Barnacles be Gone! How Do Different Liquid Treatments Affect Barnacle Adhesion?	Elliott Nye, Aidan White	Oregon Episcopal Middle School	Anna Rozzi
Consumer Products Testing	Honorable Mention	MS-CP-0019	Which Brand of Popcorn Pops Better	Salma Abdulkadir	Islamic School of Portland	Nura Elmagbari
Consumer Products Testing	Honorable Mention	MS-CP-0021	Which Paper Towel Absorbs the Best and is the Strongest?	Khadija Hassan	Islamic School of Portland	Nura Elmagbari
Consumer Products Testing	Honorable Mention	MS-CP-0046	What is the effect of the ratio of aggregate to cement on concrete strength	Dylan Murphy	Lake Oswego Junior High	Greg Mylet
Consumer Products Testing	Honorable Mention	MS-CP-0028	Zap that Zit	Hailey Pausz	Valley Catholic Middle School	Sarah Zinzer
Earth Science	First Place	MS-EA-0017	Electrifying Earthquakes	Theresa D'Silva	Summa Stoller	Pam Svenson
Earth Science	Second Place	MS-EA-0009	Dead Zones	Haley Rice	Summa Whitford	Carolee Dearborn
Earth Science	Third Place	MS-EA-0013	Cosmic Ray Detection with an Isopropanol Cloud Chamber	Benjamin Lee	ACCESS	Alfonso Garcia Arriola
Earth Science	Honorable Mention	MS-EA-0004	The Effects of Soil Composition and Moisture on the Angle of Repose	Nathan Reilly	Winterhaven Middle School	Tom Bright
Earth Science	Honorable Mention	MS-EA-0019	Tsunami Run-up Variation	Aidan Fulmer	Rachel Carson Environmental Middle School	Rebecca Hall
Earth Science	Honorable Mention	MS-EA-0016	The Effectiveness Of Various Methods of Composting Through the Testing of Temperature	Ari Bluffstone	ACCESS	Alfonso Garcia Arriola
Earth Science	Honorable Mention	MS-EA-0003	Erosion Control	Jocelyn Brown, Melly	Mark Twain Middle School	Daniel Jamsa

				Kazel, Hannah Daly		
Earth Science	Honorable Mention	MS- EA- 0008	The Acid Ocean: How Humans' CO2 Emissions Affect Marine Life	Andrea Bian	Summa Whitford	Carolee Dearborn
Energy and Transportation	First Place	MS- ET- 0014	Design of a System to Recapture Wasted Heat	Pushkar Shinde	Oregon Episcopal Middle School	Anna Rozzi
Energy and Transportation	Second Place	MS- ET- 0026	The Effect the Ratio of Structural Carbohydrates to Nonstructural Carbohydrates has on the Efficiency of Anaerobic Digestion	Jakob Hollenbeck	Summa Whitford	Carolee Dearborn
Energy and Transportation	Second Place Tie	MS- ET- 0038	Designing Low-Cost Microbial Fuel Cells (MFCs) Using Household Materials	Srikar Tallapragada	Stoller Middle School	Christina Slater
Energy and Transportation	Third Place	MS- ET- 0018	Taking the Shine Outside, Inside	Kyla Wiegand	Wood Middle School	Jennifer Stout
Energy and Transportation	Third Place Tie	MS- ET- 0037	The Good, The Bad and The Blind.	Angela Jiang	Summa Stoller	Pam Svenson
Energy and Transportation	Honorable Mention	MS- ET- 0016	How Much Electricity does a Water Wheel Make in a Rain Gutter?	Eli Ghattas	Lighthouse School	Nicholas Asay
Energy and Transportation	Honorable Mention	MS- ET- 0029	Magnetically Levitated Vehicles	Jasmine Guliani	Summa Meadow	Susan Duncan
Energy and Transportation	Honorable Mention	MS- ET- 0034	Generating Electricity from Plants	Sarah Khalil	Oregon Islamic Academy	Sahar Bassyouni
Energy and Transportation	Honorable Mention	MS- ET- 0054	Engineering a Flying Car	WILLIAM KNIGHT, WILLIAM WU	Straub Middle School	Kelsey Miller
Energy and Transportation	Honorable Mention	MS- ET- 0001	Ethanol - Is it Practical?	Fiona Dietch	Cascade Heights Public Charter School	Georgi Brunning
Engineering	First Place	MS- EG- 0060	An Innovative Method to Improve Lighting Systems by Using Retractable and Programmable Multi-Color LEDs	Ashwin Datta	Evergreen Middle School	Jessie Bader
Engineering	Second Place	MS- EG- 0075	The Search for the Perfect DNA Extraction: Testing to Extract DNA from Bananas in the Home or Classroom	Katherine Oppenheimer	Touchstone School	Dr.Lillian Oppenheimer
Engineering	Third Place	MS- EG- 0046	Novel Synthesis of Copper Nanowires	Nikhil Murthy	Summa Meadow	Susan Duncan

Engineering	Third Place Tie	MS-EG-0056	Designing a Touch-Free Interface	Kaitee Steiert	Whitford Middle School	John Leitner
Engineering	Honorable Mention	MS-EG-0042	Kick2light Soccer Ball	Emma Rosicky	Summa Whitford	Carolee Dearborn
Engineering	Honorable Mention	MS-EG-0029	Floating Automobiles	Nathan Tidball	Wood Middle School	Jennifer Stout
Engineering	Honorable Mention	MS-EG-0057	Managing Pet Food Stealing Issues	Oliver Graumann	Stoller Middle School	Christina Slater
Environmental Science	First Place	MS-EV-0055	A Novel CO2 Sequestration System	Nandini Naidu	Valley Catholic Middle School	Sarah Zinzer
Environmental Science	Second Place	MS-EV-0001	The Impact of Temperature on Phytoplankton density in Blue Lake	Aneesh Mysore	Stoller Middle School	Laura Burger
Environmental Science	Third Place	MS-EV-0070	Acid Showers Bring No Flowers	Anwasha Mukherjee	Class Academy	Jaime Mitchell
Environmental Science	Honorable Mention	MS-EV-0051	Pesticides' Effect on Stream Health	Peyton Tierney	Rachel Carson Environmental Middle School	Rebecca Hall
Environmental Science	Honorable Mention	MS-EV-0013	It's a Fowl Problem	Adam Nayak	Winterhaven Middle School	Wendy Archibald
Environmental Science	Honorable Mention	MS-EV-0046	Redefining Global Warming	Michael Ioffe	ACCESS	Alfonso Garcia Arriola
Environmental Science	Honorable Mention	MS-EV-0039	Optimal Solar Cell Technologies for Different Environments	Katie Stoehr	Summa Whitford	Carolee Dearborn
Environmental Science	Honorable Mention	MS-EV-0049	Where'd All the Frogs Go?	Taylor Overn	Stoller Middle School	Christina Slater
Mathematics and Computer Science	First Place	MS-MC-0013	Counting Complex Shapes Using Morphological Operations	Mahita Tovinkere	Summa Stoller	Nick Badyrka
Mathematics and Computer Science	Second Place	MS-MC-0011	Search Time of Search and Rescue Tactics	Keizo Morgan	Summa Meadow	Susan Duncan
Mathematics and Computer Science	Third Place	MS-MC-0015	Length of Time to Find Primes Below n	Nathan Jewell	Robert Gray Middle School	Katy Wagner-west
Mathematics and Computer Science	Honorable Mention	MS-MC-0010	Tic-Tac-Toe	Kariessa Schultz	Summa Whitford	Carolee Dearborn

Mathematics and Computer Science	Honorable Mention	MS-MC-0014	Egg Volumes	Jesse Cook	Highland Park Middle School	Karen Nelson
Medicine and Health Sciences	First Place	MS-ME-0043	Early Detection of Malignant Solitary Pulmonary Nodules (SPNS) Using a Computer Diagnostic and Automatic Screening Tool	Aditya Jain	Summa Stoller	Todd Freiboth
Medicine and Health Sciences	Second Place	MS-ME-0033	The Test of Thyme	Joan Hady	Summa Meadow	Susan Duncan
Medicine and Health Sciences	Third Place	MS-ME-0046	Is Everyone Really a Stranger?	Grant Grainger	Cascade Heights Public Charter School	Georgi Brunning
Medicine and Health Sciences	Honorable Mention	MS-ME-0041	Evaluating Fennel as a Natural Antacid versus Antacid Drugs on the Market	Mahathi Mohangowda	Stoller Middle School	Laura Burger
Medicine and Health Sciences	Honorable Mention	MS-ME-0047	Fractions of Grape Seed Extract Selectively Cause Apoptosis in Malignant Peripheral Nerve Sheath Tumors	Claire Sherman	Robert Gray Middle School	Katy Wagner-west
Medicine and Health Sciences	Honorable Mention	MS-ME-0038	Sick Scents	Annika Steele	ACCESS	Alfonso Garcia Arriola
Medicine and Health Sciences	Honorable Mention	MS-ME-0039	Does the amount of light you read in affect memory	Maryam Jama	Islamic School of Portland	Nura Elmagbari
Medicine and Health Sciences	Honorable Mention	MS-ME-0034	Hand Sanitizer vs Alcohol Wipes: Are They as Effective as Hand Washing?	Tyler Sy	Summa Whitford	Carolee Dearborn
Physics: Electromagnetic	First Place	MS-PE-0022	Solar Energy Utilization with Closed Loop Systems	Shahir Rahman	Summa Stoller	Todd Freiboth
Physics: Electromagnetic	Second Place	MS-PE-0018	Implementing Hall Effect Technologies and Applications	Yesh Godse	Stoller Middle School	Christina Slater
Physics: Electromagnetic	Third Place	MS-PE-0031	Identifying Whether or not a Galactic Collision will Form a Supermassive Black Hole	Kira Emery	Lighthouse School	Nicholas Asay
Physics: Electromagnetic	Honorable Mention	MS-PE-0014	Testing Piezoelectric Crystals On Metallic Surfaces for the Greatest Conductivity	Octavia Hogaboam	Summa Meadow	Susan Duncan
Physics: Electromagnetic	Honorable Mention	MS-PE-0023	Renewable Resources	Oliver Tipping	Highland Park Middle School	Karen Nelson
Physics: Electromagnetic	Honorable Mention	MS-PE-0033	How does changing the number of winds and the current affect the strength of the electromagnet?	Marcus Avery	Lake Oswego Junior High	Greg Mylet

Physics: Mechanical	First Place	MS- PM- 0033	A Study of Randomly Packed, Aspherical Objects	Priyansh Sharma	Summa Stoller	Nick Badyrka
Physics: Mechanical	Second Place	MS- PM- 0007	GOING BALLISTIC! The Surprising Relationship of Reservoir Volume to Barrel Length and Reservoir Pressure in a Homemade Air Cannon	Joshua Wentzel	Winterhaven Middle School	Wendy Archibald
Physics: Mechanical	Third Place	MS- PM- 0024	Earbuds vs. Headphones	Duncan Gates	ACCESS	Alfonso Garcia Arriola
Physics: Mechanical	Honorable Mention	MS- PM- 0003	A Better Bat For The World	Brice Shippen, Andy Dummer	Mark Twain Middle School	Daniel Jamsa
Physics: Mechanical	Honorable Mention	MS- PM- 0035	Insulation Proclamation	Garrett Taylor	Highland Park Summa Program	Sarah Weller
Physics: Mechanical	Honorable Mention	MS- PM- 0020	Harps and Harmonies	Heidi Hughes	Summa Meadow	Susan Duncan
Plant Sciences	First Place	MS- PL- 0037	Examining the effect of varying dye type and color on performance and efficiency of dye sensitized solar cells	Arjun Somayazulu	Summa Stoller	Todd Freiboth
Plant Sciences	Second Place	MS- PL- 0028	Photosynthesis Rates of Common Northwest Weeds	Katherine Renner	ACCESS	Alfonso Garcia Arriola
Plant Sciences	Third Place	MS- PL- 0029	A Thorny Issue	Lian Prost- Hughtart	ACCESS	Alfonso Garcia Arriola
Plant Sciences	Honorable Mention	MS- PL- 0047	Effects of pH on Elodea Plants	Larissa Chan	Touchstone School	Rosa Faust
Plant Sciences	Honorable Mention	MS- PL- 0045	Highway Plant Selection	Ysabella Rivera	St. Pius X School	Teresa Sebert