

2012 Intel Northwest Science Expo Awards

Middle School Special Awards

Special Award	Award Sponsor	Title	Student List	Organization	Adult Sponsor
Middle School Best of Fair	Forest Heights FIRST LEGO League Team Turbo Turtles	Using Genetic Algorithms to Optimize 3D Structures	Chandler Watson	Oregon Episcopal Middle School	Christopher Mader
Middle School Best of Fair	The Sawyer Family		Snigdha Kanadibhotla	Summa Stoller	Eloise Grout
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	Are Wetlands Affective Filters?	Keira Johnson	Whitford Middle School	Michael Bergmann
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	Troubled Waters	Owen Parker	St. Pius X School	Teresa Sebert
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Nocturnal Photosynthesis	Mingqian Tan	Summa Academy South	Toni West
Army Outstanding Middle School Project	Army Research Office, U.S. Army	The Effect of Gearing on Electric Vehicle Efficiency	Nolan Jones	Summa Academy South	Toni West
Army Outstanding Middle School Project	Army Research Office, U.S. Army	The Effect of Environmental Variables on Solar Panels	Gokul Kolady	Summa Academy North	Susan Duncan
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Temperature Alarm to Detect Improper Storage for the Food Industry	Hersh Godse	Summa Academy North	Susan Duncan

Army Outstanding Middle School Project	Army Research Office, U.S. Army	Phenolics, Alkaloids, Terpenes, Phytoalexins: Plant Chemical Warfare	Ananth Agarwal	Summa Academy North	Susan Duncan
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Can Robots Motivate People to Dance?	Griffin Barbieri	Bridlemile Elementary School	Larry Sherman
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Test performance after exercising	Henry Potter	Bridlemile Elementary School	Larry Sherman
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Combining Dyes To Improve Dye Sensitized Solar Cells	Vineet Edupuganti	Oregon Episcopal Middle School	Christopher Mader
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Engineering Solar Updraft Tower	Madeline Gessford	Mark Twain Middle School	Daniel Jamsa
Army Outstanding Middle School Project	Army Research Office, U.S. Army	Comparing Sound Levels of a Band Room and a Classroom	Kacy Childress	Gresham-Barlow School District	Kathy Childress
Outstanding Project in Materials Science	ASM International Foundation	A New Beam Design For Buildings and Bridges	Dhakshi Vannithamby	Stoller Middle School	Stephen Walsh
Outstanding Project Related to Energy Management and Sustainablility	Association of Energy Engineers	Cost-effective Catalyst in Polymeric Membrane Fuel Cell (Can fuel cells be changed to be more cost-effective and efficient?)	Arnob Das	Summa Stoller	Pam Svenson

Outstanding Project Related to Energy Management and Sustainability	Association of Energy Engineers	An Intelligent Power Controller	Haneef Mubarak	Stoller Middle School	Nick Badyrka
Outstanding Geoscience Project	Association Of Women Geoscientists	Soil Shaker	Camille Johnson	Rachel Carson Environmental Middle School	Rebecca Hall
Outstanding Geoscience Project	Association Of Women Geoscientists	Dangers of Soil Erosion	Tristen Wong	ACCESS	Alfonso Garcia Arriola
City of Banks Exceptional Community Environmental Sensitivity Award	City of Banks	Are Wetlands Affective Filters?	Keira Johnson	Whitford Middle School	Michael Bergmann
IEEE Special Awards	IEEE Oregon	Project Biogen	Arman Talkar	Summa Academy South	Toni West
IEEE Special Awards	IEEE Oregon	Does turbine positioning affect the voltage output of a wind farm?	Michelle Schaefer	Summa Academy North	Susan Duncan
IEEE Special Awards	IEEE Oregon	Temperature Alarm to Detect Improper Storage for the Food Industry	Hersh Godse	Summa Academy North	Susan Duncan
IEEE Special Awards	IEEE Oregon	Heating via Wireless Power Transfer	Josh Bamberger	Raleigh Hills K-8	Elise Cohen
IEEE Special Awards	IEEE Oregon	Electromagnet	Jacob Angelo	Stephens Middle School	Sam Pierce
IEEE Special Awards	IEEE Oregon	Cost-effective Catalyst in Polymeric	Arnob Das	Summa Stoller	Pam Svenson

		Membrane Fuel Cell (Can fuel cells be changed to be more cost-effective and efficient?)			
IEEE Special Awards	IEEE Oregon	A Novel, Efficient Pattern Matching Algorithm for the DNA Alphabet	Ashwin Sah	Summa Stoller	Eloise Grout
IEEE Special Awards	IEEE Oregon	An Intelligent Power Controller	Haneef Mubarak	Stoller Middle School	Nick Badyrka
Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	Ocean Acidification	Eytan Brodsky	Stoller Middle School	Leslie Koziol
Mu Alpha Theta Award	Mu Alpha Theta	A Novel, Efficient Pattern Matching Algorithm for the DNA Alphabet	Ashwin Sah	Summa Stoller	Eloise Grout
Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	Degrading a Hurricane- An attempt to reduce the strength of a hurricane through premature cloud condensation	Chaitanya Karamchedu	Stoller Middle School	Christina Slater
Innovative Engineering Award	National Society of Professional Engineers		Prathyoosha Chaya	Summa Stoller	Eloise Grout
Naval Excellence in Science and	Office of Naval Research, US	Water Purification	Olivia Duyck	Visitation School	Mrs. Carol Funk

Engineering Award	Navy and Marine Corps				
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Methods to Improve Aircraft Performance	Ashwin Datta	Evergreen Middle School	Lia Cunningham
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Electrolysis of Water	Adam Diaz	Oregon Islamic Academy	Sahar Bassyouni
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Insulation for Inspiration	Rosie Parker	St. Pius X School	Teresa Sebert
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Hovercraft	Trace Hokkanen, Nate Purves	Highland Park Middle School	Matt Doyle
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Constancy of COR: An Investigation of the Coefficient of Restitution	Priyansh Sharma	Summa Stoller	Eloise Grout
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps		Snigdha Kanadibhotla	Summa Stoller	Eloise Grout
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	Effectiveness of Silver Nanoparticles as an Antibiotic Against Nosocomial Infection-	Sharon Zhang	Summa Academy South	Toni West

		inducing Pathogens			
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	Dye Sensitized Solar Cells	Zachary Winger	Summa Academy South	Toni West
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	Does Air Quality get worse in winter? A Statistical analysis of Particulate Matter (PM2.5) Concentration.	Shayla Rao	West Sylvan Middle School	Joe Habes
Outstanding Science Project About Forests	Pacific NW Research Station, USDA Forest Service	Restoration Effect on Stream Health	Chloe Hanken	Rachel Carson Environmental Middle School	Rebecca Hall
Broadcom MASTERS nomination	Society for Science and the Public	Project Biogen	Arman Talkar	Summa Academy South	Toni West
Broadcom MASTERS nomination	Society for Science and the Public	Dye Sensitized Solar Cells	Zachary Winger	Summa Academy South	Toni West
Broadcom MASTERS nomination	Society for Science and the Public	Analyzing Hydrogen Production from Chlamydomonas Reinhardtii, Wild type Cyanobacteria, and OMutant Cyanobacteria	Akshay Pulavarty	Summa Academy North	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	Phenolics, Alkaloids, Terpenes, Phytoalexins:	Ananth Agarwal	Summa Academy North	Susan Duncan

		Plant Chemical Warfare			
Broadcom MASTERS nomination	Society for Science and the Public	Use of diatoms as bioindicators for silver nanoparticle pollution in the environment	Anirudh Jain	Summa Academy North	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	Converting Cellulose into Bio-Ethanol Fuel	Sabrina Dang	Summa Academy North	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	Is it Possible to Develop and Administer a Cat IQ Test?	Alex Oliver	Summa Academy North	Susan Duncan
Broadcom MASTERS nomination	Society for Science and the Public	Diamagnetic Levitation	Ceara Adams, Sadira Urzaa	ACCESS	Alfonso Garcia Arriola
Broadcom MASTERS nomination	Society for Science and the Public	Hydrolysis with Steel, Copper, and Aluminum Electrodes	Leo Steiner	Winterhaven Middle School	Wendy Archibald
Broadcom MASTERS nomination	Society for Science and the Public	Silkworm Development in Different Climates	Cole Fuller	Bend Science Station	Danny Martin
Broadcom MASTERS nomination	Society for Science and the Public	Light Up the Night	Daniel Smith	Evergreen Middle School	Lia Cunningham
Broadcom MASTERS nomination	Society for Science and the Public	Designing Energy Efficient Homes	Nandini Naidu	Valley Catholic Middle School	June Poling
Broadcom MASTERS nomination	Society for Science and the Public	Potato Cannon	Scott Schreiner, Alex Olander	Oregon Episcopal Middle School	Christopher Mader

Broadcom MASTERS nomination	Society for Science and the Public	Using Genetic Algorithms to Optimize 3D Structures	Chandler Watson	Oregon Episcopal Middle School	Christopher Mader
Broadcom MASTERS nomination	Society for Science and the Public	Cost-effective Catalyst in Polymeric Membrane Fuel Cell (Can fuel cells be changed to be more cost-effective and efficient?)	Arnob Das	Summa Stoller	Pam Svenson
Broadcom MASTERS nomination	Society for Science and the Public	Improving Knee Pads	Jason Collyer	Summa Stoller	Pam Svenson
Broadcom MASTERS nomination	Society for Science and the Public	Insulation for Inspiration	Rosie Parker	St. Pius X School	Teresa Sebert
Broadcom MASTERS nomination	Society for Science and the Public	Dutch Bantam Chicken Genetics	Eve Hallock	Wood Middle School	Cara Hallock
Broadcom MASTERS nomination	Society for Science and the Public	The String Theory	William Mitchell	Health and Science School	Stella Bergman
Broadcom MASTERS nomination	Society for Science and the Public		Prathyosha Chaya	Summa Stoller	Eloise Grout
Broadcom MASTERS nomination	Society for Science and the Public	Constancy of COR: An Investigation of the Coefficient of Restitution	Priyansh Sharma	Summa Stoller	Eloise Grout
Broadcom MASTERS nomination	Society for Science and the Public	Human Facial Recognition	Ifrah Javed	Summa Stoller	Eloise Grout

Broadcom MASTERS nomination	Society for Science and the Public	A Novel, Efficient Pattern Matching Algorithm for the DNA Alphabet	Ashwin Sah	Summa Stoller	Eloise Grout
Broadcom MASTERS nomination	Society for Science and the Public		Snigdha Kanadibhotla	Summa Stoller	Eloise Grout
Broadcom MASTERS nomination	Society for Science and the Public	Degrading a Hurricane- An attempt to reduce the strength of a hurricane through premature cloud condensation	Chaitanya Karamchedu	Stoller Middle School	Christina Slater
Broadcom MASTERS nomination	Society for Science and the Public	Post Stroke Finger Exerciser	Andy Getty, Ryan Camp	Five Oaks Middle School	Tricia Halonen
Outstanding Solar Energy Project	SolarWorld	Photon Fuel	Xander Clair	Summa Academy South	Toni West
Outstanding Solar Energy Project	SolarWorld	Dye Sensitized Solar Cells	Zachary Winger	Summa Academy South	Toni West
Outstanding Solar Energy Project	SolarWorld	The Effect of Environmental Variables on Solar Panels	Gokul Kolady	Summa Academy North	Susan Duncan
Outstanding Solar Energy Project	SolarWorld	Solar Power Car	Sebastian Guess	Bridlemile Elementary School	Larry Sherman
Outstanding Solar Energy Project	SolarWorld	Effect of Wavelength (Color) of Light on Electricity from Solar Cells	Rikhia Chatterjee	Valley Catholic Middle School	June Poling

Outstanding Solar Energy Project	SolarWorld	Combining Dyes To Improve Dye Sensitized Solar Cells	Vineet Edupuganti	Oregon Episcopal Middle School	Christopher Mader
Outstanding Solar Energy Project	SolarWorld	Solar Parabolic Dish Designs	Alex Young	Summa Stoller	Pam Svenson
Outstanding Solar Energy Project	SolarWorld	What Different Types of Light Sources will Power a Solar Fan	Amin Lazliy	Islamic School of Portland	Nura Elmagbari
Outstanding Solar Energy Project	SolarWorld	Solar Power	Varun Akula	Meadow Park Middle School	Amber Evans
Outstanding Solar Energy Project	SolarWorld	Fruity Solar Cells	Karina Shah	Summa Stoller	Eloise Grout
Outstanding Air Quality Project	Southwest Clean Air Agency	Effects of Acid Rain on Various Surfaces	Mihir Paralkar, Mayur Paralkar	Twality Middle School	Prasanna Paralkar
i-inspire First Place Award	The Hall Family	Empty Oceans: How to prevent overfishing and fisheries collapse	Daniel Chiu	Summa Stoller	Eloise Grout
i-inspire Second Place Award	The Hall Family		Prathyoosha Chaya	Summa Stoller	Eloise Grout
i-inspire Third Place Award	The Hall Family	Early Detection of Lung Cancer Carcinogens: The Lung Cancer Carcinogen Alerter	Aditya Jain	Summa Stoller	Pam Svenson
Outstanding Science or	U.S. Air Force	Project Biogen	Arman Talkar	Summa Academy South	Toni West

Engineering Project					
Outstanding Science or Engineering Project	U.S. Air Force	Analyzing Hydrogen Production from Chlamydomonas Reinhardtii, Wild type Cyanobacteria, and O Mutant Cyanobacteria	Akshay Pulavarty	Summa Academy North	Susan Duncan
Outstanding Science or Engineering Project	U.S. Air Force	Does turbine positioning affect the voltage output of a wind farm?	Michelle Schaefer	Summa Academy North	Susan Duncan
Outstanding Science or Engineering Project	U.S. Air Force	Uplifting Airfoils	Joshua Wentzel	Winterhaven Middle School	Wendy Archibald
Outstanding Science or Engineering Project	U.S. Air Force	Light Up the Night	Daniel Smith	Evergreen Middle School	Lia Cunningham
Outstanding Science or Engineering Project	U.S. Air Force	The Physics of Follow-Through	Tia Bitz	Memorial Middle School	Michael Baker
Outstanding Science or Engineering Project	U.S. Air Force	Improving Knee Pads	Jason Collyer	Summa Stoller	Pam Svenson
Outstanding Science or Engineering Project	U.S. Air Force	Solar Parabolic Dish Designs	Alex Young	Summa Stoller	Pam Svenson
Outstanding Science or	U.S. Air Force	Fruity Solar Cells	Karina Shah	Summa Stoller	Eloise Grout

Engineering Project					
Outstanding Project in Water Quality	U.S. Geological Survey, Oregon Water Science Center	Ocean Acidification on Shelled Creatures	Malia Shipsey	Winterhaven Middle School	Tom Bright
Outstanding Project in Water Quality	U.S. Geological Survey, Oregon Water Science Center	Impact of Coastline Slope on Tsunami Wave Heights	Nicholas Battey	East Sylvan Middle School	Joe Blowers
Outstanding Project in Water Quality	U.S. Geological Survey, Oregon Water Science Center	Accuracy of Portland vs. Central Coast Rainfall Predictions	Finn Ramos	East Sylvan Middle School	Joe Blowers
Outstanding Use of the International System of Units	U.S. Metric Association	Dye Sensitized Solar Cells	Zachary Winger	Summa Academy South	Toni West
Outstanding Use of the International System of Units	U.S. Metric Association	Lacrosse Stick Length Tests	Ian Ray	Bend Science Station	Danny Martin
Outstanding Use of the International System of Units	U.S. Metric Association	Get Energized	Nathan Silenzi	Valley Catholic Middle School	June Poling
Outstanding Use of the International System of Units	U.S. Metric Association	Experimenting with Electromagnets	Yesh Godse	Stoller Middle School	Kirk Koehler
Outstanding Use of the	U.S. Metric Association	Constancy of COR: An	Priyansh Sharma	Summa Stoller	Eloise Grout

International System of Units		Investigation of the Coefficient of Restitution			
Naval Excellence in Science and Engineering Award	US Navy & USMC	Water Purification	Olivia Duyck	Visitation School	Mrs. Carol Funk
Naval Excellence in Science and Engineering Award	US Navy & USMC	Methods to Improve Aircraft Performance	Ashwin Datta	Evergreen Middle School	Lia Cunningham
Naval Excellence in Science and Engineering Award	US Navy & USMC	Electrolysis of Water	Adam Diaz	Oregon Islamic Academy	Sahar Bassyouni
Naval Excellence in Science and Engineering Award	US Navy & USMC	Insulation for Inspiration	Rosie Parker	St. Pius X School	Teresa Sebert
Naval Excellence in Science and Engineering Award	US Navy & USMC	Hovercraft	Trace Hokkanen, Nate Purves	Highland Park Middle School	Matt Doyle
Naval Excellence in Science and Engineering Award	US Navy & USMC	Constancy of COR: An Investigation of the Coefficient of Restitution	Priyansh Sharma	Summa Stoller	Eloise Grout
Naval Excellence in Science and Engineering Award	US Navy & USMC		Snigdha Kanadibhotla	Summa Stoller	Eloise Grout

Water Prize Award of Excellence	Water Environment Federation	Wave Velocity	Haley Rice	Summa Academy South	Toni West
Water Prize Award of Excellence	Water Environment Federation	Can Light Measure Dirt?	Giselle Cohen	Winterhaven Middle School	Wendy Archibald
Water Prize Award of Excellence	Water Environment Federation	Shaking for Suds	Katie Amann	Valley Catholic Middle School	June Poling
Water Prize Award of Excellence	Water Environment Federation	How Seawall Shapes Affect the Amount of Water Flowing Over in a Tsunami	Joshua Cheng	Valley Catholic Middle School	June Poling
Water Prize Award of Excellence	Water Environment Federation	Are Wetlands Affective Filters?	Keira Johnson	Whitford Middle School	Michael Bergmann
Water Prize Award of Excellence	Water Environment Federation	Effects of Acid Rain on Various Surfaces	Mihir Paralkar, Mayur Paralkar	Twality Middle School	Prasanna Paralkar

Middle School Category Awards

Category	Place	Exhibit #	Title	Student List	Organization	Adult Sponsor
Animal Science and Microbiology	First Place	MS-AM-0031	Dutch Bantam Chicken Genetics	Eve Hallock	Wood Middle School	Cara Hallock
Animal Science and Microbiology	Second Place	MS-AM-0004	Silkworm Development in Different Climates	Cole Fuller	Bend Science Station	Danny Martin
Animal Science and Microbiology	Third Place	MS-AM-0047	An Experimental Study of the Biomechanical Properties of	Utsav Ghosh	Stoller Middle School	Nick Badyrka

			Calcium Enhanced Bones Paired With Different Amounts of Vitamin D3			
Animal Science and Microbiology	Honorable Mention	MS-AM-0026	A Fuel Cell of the Future	Aidan Mellies	ACCESS	Alfonso Garcia Arriola
Animal Science and Microbiology	Honorable Mention	MS-AM-0048	Recombination of the Henna gene from Drosophila melanogaster into Escherichia coli	Tara Sengupta, Belinda Li	Summa Academy South	Toni West
Behavioral and Social Science	First Place	MS-BE-0064	Human Facial Recognition	Ifrah Javed	Summa Stoller	Eloise Grout
Behavioral and Social Science	Second Place	MS-BE-0028	Is it Possible to Develop and Administer a Cat IQ Test?	Alex Oliver	Summa Academy North	Susan Duncan
Behavioral and Social Science	Third Place	MS-BE-0037	Candy Confusion	Tessa Kemper	Rachel Carson Environmental Middle School	Rebecca Hall
Behavioral and Social Science	Honorable Mention	MS-BE-0068	The Influence of Language on Pitch	Melodie Deisher, Justine Deisher	Evergreen Middle School	Lia Cunningham
Behavioral and Social Science	Honorable Mention	MS-BE-0058	Music for Thought: Study of Short and Long-Term Memory of Informtional Reading in Middle School Students	Ioana Beatrice Cosmin	Summa Academy South	Toni West

Behavioral and Social Science	Honorable Mention	MS-BE-0069	Clothing Brand Awareness, Brand Preference and Purchase Decisions among 12-13 year-old Girls	Grace Masback	Robert Gray Middle School	Katy Wagner-west
Chemistry	First Place	MS-CH-0013	Analyzing Hydrogen Production from Chlamydomonas Reinhardtii, Wild type Cyanobacteria, and O Mutant Cyanobacteria	Akshay Pulavarty	Summa Academy North	Susan Duncan
Chemistry	First Place Tie	MS-CH-0062	Hydrolysis with Steel, Copper, and Aluminum Electrodes	Leo Steiner	Winterhaven Middle School	Wendy Archibald
Chemistry	Second Place	MS-CH-0043	Light Up the Night	Daniel Smith	Evergreen Middle School	Lia Cunningham
Chemistry	Second Place Tie	MS-CH-0052	The Effect of pH on Cellulase	Nicholas Liskij	Summa Academy South	Toni West
Chemistry	Third Place	MS-CH-0027	An Apple A Day...	Shantih Kleen	Winterhaven Middle School	Wendy Archibald
Chemistry	Third Place Tie	MS-CH-0010	Saving The Earth: One Solvent at a Time	Brian Yang	ACCESS	Alfonso Garcia Arriola
Chemistry	Honorable Mention	MS-CH-0022	Anti-Oxidative Effects of Banana Oil on Fruits	Mohamed Jama	Islamic School of Portland	Nura Elmagbari
Chemistry	Honorable Mention	MS-CH-0040	Ocean Acidification on Shelled Creatures	Malia Shipsey	Winterhaven Middle School	Tom Bright

Chemistry	Honorable Mention	MS-CH-0035	Salt Crystal Growth	Kate Bauman, Cassy Harrigan	Highland Park Middle School	Matt Doyle
Chemistry	Honorable Mention	MS-CH-0051	The Dissolution Rate of Multivitamins	Mackenzie Randolph	Stoller Middle School	Christina Slater
Chemistry	Honorable Mention	MS-CH-0002	The Invincible Soap Bubble	Natalee French, Anna Keller	Leslie Middle School	Michael Rockow
Consumer Products Testing	First Place	MS-CP-0020	Insulation for Inspiration	Rosie Parker	St. Pius X School	Teresa Sebert
Consumer Products Testing	Second Place	MS-CP-0054	Improving Knee Pads	Jason Collyer	Summa Stoller	Pam Svenson
Consumer Products Testing	Third Place	MS-CP-0030	Was Lady Gaga Right? Stop Telephoning Me! A Study of Cell Phone Radiation and the Effects of Cases	Kate Pippenger	West Sylvan Middle School	Joe Habes
Consumer Products Testing	Honorable Mention	MS-CP-0016	What is the effect of shin guard design on shock absorption?	Chloe Jensen	ACCESS	Alfonso Garcia Arriola
Earth Science	First Place	MS-EA-0021	Degrading a Hurricane- An attempt to reduce the strength of a hurricane through premature cloud condensation	Chaitanya Karamchedu	Stoller Middle School	Christina Slater
Earth Science	Second Place	MS-EA-0022	Wave Velocity	Haley Rice	Summa Academy South	Toni West

Earth Science	Third Place	MS-EA-0014	Soil Shaker	Camille Johnson	Rachel Carson Environmental Middle School	Rebecca Hall
Earth Science	Honorable Mention	MS-EA-0011	Dangers of Soil Erosion	Tristen Wong	ACCESS	Alfonso Garcia Arriola
Earth Science	Honorable Mention	MS-EA-0012	Making Rochelle Salt and Testing for Relationships Between the Mass and the Voltage Produced	Octavia Hogaboam	Summa Academy North	Susan Duncan
Earth Science	Honorable Mention	MS-EA-0018	Tornado Versus Nitrogen	Nathan Baker	Memorial Middle School	Chris Bright
Energy and Transportation	First Place	MS-ET-0050	Cost-effective Catalyst in Polymeric Membrane Fuel Cell (Can fuel cells be changed to be more cost-effective and efficient?)	Arnob Das	Summa Stoller	Pam Svenson
Energy and Transportation	Second Place	MS-ET-0027	Converting Cellulose into Bio-Ethanol Fuel	Sabrina Dang	Summa Academy North	Susan Duncan
Energy and Transportation	Third Place	MS-ET-0040	Methods to Improve Aircraft Performance	Ashwin Datta	Evergreen Middle School	Lia Cunningham
Energy and Transportation	Third Place Tie	MS-ET-0048	Fruity Solar Cells	Karina Shah	Summa Stoller	Eloise Grout
Energy and Transportation	Honorable Mention	MS-ET-0016	Combining Dyes To Improve Dye Sensitized Solar Cells	Vineet Edupuganti	Oregon Episcopal Middle School	Christopher Mader
Energy and Transportation	Honorable Mention	MS-ET-0028	Does turbine positioning affect the voltage	Michelle Schaefer	Summa Academy North	Susan Duncan

			output of a wind farm?			
Energy and Transportation	Honorable Mention	MS-ET-0043	The Need for Speed: What variable makes a Hot Wheels car go faster?	Griffin Walth	Winterhaven Middle School	Tom Bright
Energy and Transportation	Honorable Mention	MS-ET-0052	The Effect of Gearing on Electric Vehicle Efficiency	Nolan Jones	Summa Academy South	Toni West
Engineering	First Place	MS-EG-0047		Prathyosha Chaya	Summa Stoller	Eloise Grout
Engineering	Second Place	MS-EG-0056	The String Theory	William Mitchell	Health and Science School	Stella Bergman
Engineering	Third Place	MS-EG-0041	Combination Wind Turbine Tower Drag	Katie Fo	Summa Academy South	Toni West
Engineering	Third Place Tie	MS-EG-0038	A New Beam Design For Buildings and Bridges	Dhakshi Vannithamby	Stoller Middle School	Stephen Walsh
Engineering	Honorable Mention	MS-EG-0024	Tsunami waves	Kaden Profit	Rachel Carson Environmental Middle School	Rebecca Hall
Engineering	Honorable Mention	MS-EG-0019	Temperature Alarm to Detect Improper Storage for the Food Industry	Hersh Godse	Summa Academy North	Susan Duncan
Environmental Science	First Place	MS-EV-0048	Designing Energy Efficient Homes	Nandini Naidu	Valley Catholic Middle School	June Poling
Environmental Science	Second Place	MS-EV-0014	Use of diatoms as bioindicators for silver nanoparticle	Anirudh Jain	Summa Academy North	Susan Duncan

			pollution in the environment			
Environmental Science	Third Place	MS-EV-0012	Troubled Waters	Owen Parker	St. Pius X School	Teresa Sebert
Environmental Science	Honorable Mention	MS-EV-0045	Are Wetlands Affective Filters?	Keira Johnson	Whitford Middle School	Michael Bergmann
Environmental Science	Honorable Mention	MS-EV-0055		Mahita Tovinkere	Summa Stoller	Eloise Grout
Environmental Science	Honorable Mention	MS-EV-0020	Sad Shrimp	Elise Kuechle	Rachel Carson Environmental Middle School	Rebecca Hall
Environmental Science	Honorable Mention	MS-EV-0013	Lead Concentrations in Urban Gardens in Portland, Oregon.	Ari Bluffstone	ACCESS	Alfonso Garcia Arriola
Mathematics and Computer Science	First Place	MS-MC-0006	Using Genetic Algorithms to Optimize 3D Structures	Chandler Watson	Oregon Episcopal Middle School	Christopher Mader
Mathematics and Computer Science	Second Place	MS-MC-0013	Project Biogen	Arman Talkar	Summa Academy South	Toni West
Mathematics and Computer Science	Second Place Tie	MS-MC-0012	A Novel, Efficient Pattern Matching Algorithm for the DNA Alphabet	Ashwin Sah	Summa Stoller	Eloise Grout
Mathematics and Computer Science	Honorable Mention	MS-MC-0007	Sabermetrics: Can It Predict The Number of Wins the Next Year?	Nick Smith	Memorial Middle School	Michael Baker
Medicine and Health Sciences	First Place	MS-ME-0050		Snigdha Kanadibhotla	Summa Stoller	Eloise Grout

Medicine and Health Sciences	Second Place	MS-ME-0052	Post Stroke Finger Exerciser	Andy Getty, Ryan Camp	Five Oaks Middle School	Tricia Halonen
Medicine and Health Sciences	Third Place	MS-ME-0038	Tearing the Ties	Hiya Banerjee	Summa Stoller	Eloise Grout
Medicine and Health Sciences	Third Place Tie	MS-ME-0039	Which Spice is the Most Effective Anti-Oxidant	Sai Bandi	Stoller Middle School	Jennifer Savidge
Medicine and Health Sciences	Honorable Mention	MS-ME-0036	Effectiveness of Silver Nanoparticles as an Antibiotic Against Nosocomial Infection-inducing Pathogens	Sharon Zhang	Summa Academy South	Toni West
Medicine and Health Sciences	Honorable Mention	MS-ME-0020	Grape seed extract causes malignant peripheral nerve sheath tumors to undergo apoptosis	Claire Sherman	West Sylvan Middle School	Joe Habes
Medicine and Health Sciences	Honorable Mention	MS-ME-0029	The Effect of Coronary Artery Disease on the Human Heart	Olivia Rabin	Highland Park Middle School	Matt Doyle
Physics: Electromagnetic	First Place	MS-PE-0017	Dye Sensitized Solar Cells	Zachary Winger	Summa Academy South	Toni West
Physics: Electromagnetic	Second Place	MS-PE-0003	Diamagnetic Levitation	Ceara Adams, Sadira Urzaa	ACCESS	Alfonso Garcia Arriola
Physics: Electromagnetic	Third Place	MS-PE-0019	Milk Jug Magic	Beverly Skinner, Lydia McLeod	Whitford Middle School	Michael Bergmann

Physics: Electromagnetic	Honorable Mention	MS-PE- 0005	Rainbow Light- Emitting Diodes	Molly VanDyke, Naomi Duyck	Visitation School	Mrs. Carol Funk
Physics: Electromagnetic	Honorable Mention	MS-PE- 0008	Heating via Wireless Power Transfer	Josh Bamberger	Raleigh Hills K-8	Elise Cohen
Physics: Electromagnetic	Honorable Mention	MS-PE- 0016	New Eco- Friendly Maglev Design	Muhammad Shahir Rahman	Summa Stoller	Pam Svenson
Physics: Mechanical	First Place	MS-PM- 0011	Potato Cannon	Scott Schreiner, Alex Olander	Oregon Episcopal Middle School	Christopher Mader
Physics: Mechanical	Second Place	MS-PM- 0034	Constancy of COR: An Investigation of the Coefficient of Restitution	Priyansh Sharma	Summa Stoller	Eloise Grout
Physics: Mechanical	Third Place	MS-PM- 0036	Effects of Clothing Barriers on Heat Transfer	Lauren Petersen	Summa Academy South	Toni West
Physics: Mechanical	Honorable Mention	MS-PM- 0018	Electric Guitar Strings and Pitches	Oliver Tawney	Summa Academy North	Susan Duncan
Physics: Mechanical	Honorable Mention	MS-PM- 0035	Angles, Ranges, and Everything in Between	Sehel Tahir	Stoller Middle School	Christina Slater
Physics: Mechanical	Honorable Mention	MS-PM- 0042	Comparing Sound Levels of a Band Room and a Classroom	Kacy Childress	Gresham-Barlow School District	Kathy Childress
Plant Sciences	First Place	MS-PL- 0012	Phenolics, Alkaloids, Terpenes, Phytoalexins: Plant Chemical Warfare	Ananth Agarwal	Summa Academy North	Susan Duncan

Plant Sciences	Second Place	MS-PL-0002	Super-Corn!: Some Composts Make Corn Plants Grow Triumphantly	Fetheya Alattar	Adventure Homeschool	Manar Alattar
Plant Sciences	Third Place	MS-PL-0025	The Green Eating Machine	Nate Wessels, Francis Duyck	Visitation School	Mrs. Carol Funk
Plant Sciences	Third Place Tie	MS-PL-0037	Adapting to Modern Life	Logan Slayter	Memorial Middle School	Chris Bright
Plant Sciences	Honorable Mention	MS-PL-0039	Nocturnal Photosynthesis	Mingqian Tan	Summa Academy South	Toni West
Plant Sciences	Honorable Mention	MS-PL-0049	The effects of surroundings on alfalfa growth	Sophia Cowles	Valley Catholic Middle School	June Poling
Plant Sciences	Honorable Mention	MS-PL-0028	Vitamin C in Oranges	Sarah Perez	Portland Lutheran School	Kieffer Tarbell

High School Special Awards

Special Award	Award Sponsor	Title	Student List	Organization	Adult Sponsor
Best of Fair-Life	Legacy Emanuel Medical Center	Feasibility of creating quality silage in small quantities	Ruth Johnston	Tillamook High School	Clair Thomas
Best of Fair-Physical	Lincoln High School FIRST TECH Challenge Team Nanites	Small Geometric Progressions Modulo N for Deterministic Polynomial Selection	Aishwarya Vardhana	Jesuit High School	Ananda Vardhana
ISEF Finalist	Northwest Science Expo System	Improving Computer Vision and 3D Environment Object Recognition in Real- Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
ISEF Finalist	Northwest Science Expo System	Complexity of Interlocking Polyominoes	Sidharth Dhawan	Westview High School	Debbie Cooper

ISEF Finalist	Northwest Science Expo System	The Relationship Between Quality of Sleep and Symptoms of Attention Deficit Disorder	Annie Gilbert, Kara Gilbert	Wilsonville High School	Jen Tinker
ISEF Finalist	Northwest Science Expo System	Feasibility of creating quality silage in small quantities	Ruth Johnston	Tillamook High School	Clair Thomas
ISEF Finalist	Northwest Science Expo System	Shining Like the Sun: A Quantum Mechanical Study of White-Light LEDs	Valerie Ding	Catlin Gabel School	Andrew Merrill
ISEF Finalist	Northwest Science Expo System	Effects of Electromagnetic Fields on Virulence and Viability of K-12 E. coli	Andrew Chen	Beaverton High School	Mike Blok
OSU College of Engineering Scholarship	Oregon State University	Cylindrical Plug Design to Reduce Plantar Pressure and Stabilize the Sesamoid Bones	Karina Hiroshige	Oregon Episcopal School	Catherine Molloseau
OSU College of Engineering Scholarship	Oregon State University	Computer Aided Diagnosis of Melanoma Cancers	Elizabeth Zhao	Jesuit High School	Helen Pang
OSU General Scholarship	Oregon State University	Feasibility of creating quality silage in small quantities	Ruth Johnston	Tillamook High School	Clair Thomas
OSU General Scholarship	Oregon State University	Affect of Angle Variation on the Relative Area of Eschrichtius Robustus Markings	Emily Waggoner	Bend Science Station	David Bermudez
OSU General Scholarship	Oregon State University	The Toxicological Effect of Emissions from Building Materials on Lung Health	Naomi Shah	Sunset High School	Chetan Shah

PSU Maseeh College of Engineering and Computer Science Computer Sciences Scholarship	PSU College of Engineering and Computer Science	Analyzing the effects of chlorine-washed sand in a biosand filter	Medha Pulla, Shradha Pulla	Harriet Tubman Leadership Academy for Young Women	Shannon Kittrick
University of Oregon Scholarships	University of Oregon	The Effects of Hypoxia on Human Adipose Tissue Inflammation and Metabolism	Adarsh Bhatt	Westview High School	Debbie Cooper
University of Oregon Scholarships	University of Oregon	Optimization of Quantum Multiplexers using Spectral Transformations	Tahsin Saffat	Westview High School	Debbie Cooper
University of Oregon Scholarships	University of Oregon	The Effect of Chemotherapy on Mouse Oligodendrocytes	Doug Goldstein	Lincoln High School	Dr. Dave Hamilton
Outstanding Chemistry Project	American Chemical Society, Portland Section	Synthesis and Properties of New Antimalarial Drugs Di-Adamantane Amine	Sovijja Pou	Jesuit High School	Sovitj Pou
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	The effect of roofing on city temperature and internal temperature of buildings.	James Topping, Madison Smith	West Linn High School	Shawn McDevitt
Outstanding Project in an Atmospheric Science Exhibit	American Meteorological Society	A Novel Application of Arundo Donax Biochar for Soil Amendment to Reduce Nitrous Oxide Emissions and Enhance Plant Growth	Meredith Loy	Oregon Episcopal School	Catherine Molloseau

Outstanding Research in Psychology	American Psychological Association	Teacher, Can I Get Another Day?	Brian Orozco, Randy Chen	Cleveland High School	Ronda Royal, Ph.D.
Vardhana Innovative Presentation	Anarghya Vardhana	Does the Interdependent Relationship Between Black Holes And Their Galaxies Rise to the Level of A Physical Principle?	Amiel Patton-Hall	Oregon Episcopal School	Bevin Daglen
Superconductivity and Advanced Materials	Applied Superconductivity Conference 2012	The Fabrication and Characterization of a High Permeability Iron- Nickel Thin Film Alloy for Giant Magneto Impedance Applications	Harsha Uppili	Oregon Episcopal School	Bevin Daglen
Superconductivity and Advanced Materials second place	Applied Superconductivity Conference 2012	Generating Energy From Rainfall	Zoe Maxwell, Arianna Hall, Clara Altemus	West Linn High School	Julie McDevitt
Army Awards for Scientific and Engineering Excellence	Army Research Office, U.S. Army	Improving Computer Vision and 3D Environment Object Recognition in Real-Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
Army Awards for Scientific and Engineering Excellence	Army Research Office, U.S. Army	Pellet Ballistics	Paul Pham, Aleck Blanger	Gresham High School	Kathy Childress
Army Awards for Scientific and Engineering Excellence	Army Research Office, U.S. Army	Assessing Dust Collection Methods for Future Investigation of Airborne Extremophiles	Hannah Burke, Alexis Austin	Wilsonville High School	Jay Schauer

Army Outstanding High School Project	Army Research Office, U.S. Army	Improving Computer Vision and 3D Environment Object Recognition in Real-Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
Outstanding Project in Materials Science	ASM International Foundation	Determining the Properties of TiO ₂ Nanoparticles to Improve the Efficiency of Photoelectrochemical Cells	Ayush Gupta	Oregon Episcopal School	Bill Lamb
Outstanding Project Related to Energy Management and Sustainability	Association of Energy Engineers	The effect of roofing on city temperature and internal temperature of buildings.	James Topping, Madison Smith	West Linn High School	Shawn McDevitt
Outstanding Project Related to Energy Management and Sustainability	Association of Energy Engineers	Optimizing the Microbial Fuel Cell-Microbial Electrolysis Cell Coupled System for Sustainable Hydrogen Gas Production, Electricity Generation, and Improved Wastewater Treatment	Ajay Krishnan	Oregon Episcopal School	Bevin Daglen
Outstanding Geoscience Project	Association Of Women Geoscientists	Assessing Dust Collection Methods for Future Investigation of Airborne Extremophiles	Hannah Burke, Alexis Austin	Wilsonville High School	Jay Schauer
IEEE Special Awards	IEEE Oregon	Determining the Properties of TiO ₂ Nanoparticles to Improve the	Ayush Gupta	Oregon Episcopal School	Bill Lamb

		Efficiency of Photoelectrochemical Cells			
IEEE Special Awards	IEEE Oregon	Improving Computer Vision and 3D Environment Object Recognition in Real-Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
IEEE Special Awards	IEEE Oregon	The Effect of Age on the Hasty Glance Method of Eliciting Deja Vu	Duncan Prince, Caleb Archuleta	West Linn High School	Jeff Bilyeu
IEEE Special Awards	IEEE Oregon	Effects of Electromagnetic Fields on Virulence and Viability of K-12 E. coli	Andrew Chen	Beaverton High School	Mike Blok
IEEE Special Awards	IEEE Oregon	Autonomous Pipe Navigation Machine	Dylan Shields	Catlin Gabel School	Veronica Ledoux
IEEE Special Awards	IEEE Oregon	Development and Optimization of Novel Elliptic Curve Scalar Multiplication Algorithms for Faster and Safer Public-Key Cryptosystems	Vinay Iyengar	Oregon Episcopal School	Bevin Daglen
Intel Excellence in Computer Science	Intel Corporation	Improving Computer Vision and 3D Environment Object Recognition in Real-Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
Outstanding Chemistry Related Project	Iota Sigma Pi	How does the Amount of Cobalt Oxide Effect Certain Atributes of Glass?	Kristin Grant	Oregon Episcopal School	Catherine Molloseau

Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	Holden Creek recovery based on macro-invertebrates	Brenten Anderson	Tillamook High School	Clair Thomas
Mu Alpha Theta Award	Mu Alpha Theta	Small Geometric Progressions Modulo N for Deterministic Polynomial Selection	Aishwarya Vardhana	Jesuit High School	Ananda Vardhana
NOAA's Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	Holden Creek recovery based on macro-invertebrates	Brenten Anderson	Tillamook High School	Clair Thomas
Innovative Engineering Award	National Society of Professional Engineers	The Fabrication and Characterization of a High Permeability Iron- Nickel Thin Film Alloy for Giant Magneto Impedance Applications	Harsha Uppili	Oregon Episcopal School	Bevin Daglen
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Determining the Properties of TiO ₂ Nanoparticles to Improve the Efficiency of Photoelectrochemical Cells	Ayush Gupta	Oregon Episcopal School	Bill Lamb
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Real-time Prostate Motion Assessment; Image-guidance and the Temporal Dependence of Intra-fraction motion	Amanu Haile	Westview High School	Debbie Cooper
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	Small Geometric Progressions Modulo N for Deterministic Polynomial Selection	Aishwarya Vardhana	Jesuit High School	Ananda Vardhana
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	The Effect of Chemotherapy on Mouse Oligodendrocytes	Doug Goldstein	Lincoln High School	Dr. Dave Hamilton

Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	The Fabrication and Characterization of a High Permeability Iron- Nickel Thin Film Alloy for Giant Magneto Impedance Applications	Harsha Uppili	Oregon Episcopal School	Bevin Daglen
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	Characterization of the Relationship between Pseudomonas aeruginosa Acyl-homoserine Lactone Based Quorum Sensing and Innate Macrophage Function in vitro	Spencer Chang	West Linn High School	Jonathan Davies
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	Understanding the Role of JAK2V617F in Inducing Myeloid-Specific Malignancies	Meghana Kalavar	Jesuit High School	Jyothi Kalavar
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	The Toxicological Effect of Emissions from Building Materials on Lung Health	Naomi Shah	Sunset High School	Chetan Shah
Award for Excellence in Scientific Research in Environmental Health	Oregon Environmental Health Association	Potential Control of New Zealand Mudsnaills by Bufflehead Ducks	Ashlynn Sheneman, Bryton Dorland	Tillamook High School	Clair Thomas
Outstanding Science Project About Forests	Pacific NW Research Station, USDA Forest Service	Comparison Of Vegetative Recovery On Roads Decomissioned in Various Ways	Austin Brown	Tillamook High School	Clair Thomas

Sustainable Development Award	Ricoh Corporation	Optimizing the Microbial Fuel Cell-Microbial Electrolysis Cell Coupled System for Sustainable Hydrogen Gas Production, Electricity Generation, and Improved Wastewater Treatment	Ajay Krishnan	Oregon Episcopal School	Bevin Daglen
Outstanding Project in In Vitro Biology	Society for in Vitro Biology	Generation of Monkey Induced Pluripotent Stem Cells In The Absence Of Sox2 and C-Myc	Mina Guo	Oregon Episcopal School	Peter Langley
Outstanding Air Quality Project	Southwest Clean Air Agency	The Toxicological Effect of Emissions from Building Materials on Lung Health	Naomi Shah	Sunset High School	Chetan Shah
TiE Entrepreneurship second place	TiE Oregon	Small Geometric Progressions Modulo N for Deterministic Polynomial Selection	Aishwarya Vardhana	Jesuit High School	Ananda Vardhana
TiE Entrepreneurship second place	TiE Oregon	Autonomous Pipe Navigation Machine	Dylan Shields	Catlin Gabel School	Veronica Ledoux
TiE Oregon Entrepreneurship First Place Award	TiE Oregon	Shining Like the Sun: A Quantum Mechanical Study of White-Light LEDs	Valerie Ding	Catlin Gabel School	Andrew Merrill
TiE Oregon Entrepreneurship First Place Award	TiE Oregon	MyInsul.in: Decision Support for Inpatient Physicians Managing Hyperglycemia	Annelise Cummings, Alexander Harding	Cleveland High School	Ronda Royal, Ph.D.

TiE Oregon Entrepreneurship Honorable Mention	TiE Oregon	Improving assembly speed and stability of a kayakamaran flotilla	Colin Atchison	Tillamook High School	Clair Thomas
TiE Oregon Entrepreneurship Honorable Mention	TiE Oregon	Analyzation of Stove Top Heating Efficiency	Benjamin Whitenack, Kameron LaCalli	West Salem High School	Michael Lampert
TiE Oregon Entrepreneurship Honorable Mention	TiE Oregon	Computer Aided Diagnosis of Melanoma Cancers	Elizabeth Zhao	Jesuit High School	Helen Pang Bottom of Form
U.S. Air Force Outstanding Project	U.S. Air Force	The Effect of Age on the Hasty Glance Method of Eliciting Deja Vu	Duncan Prince, Caleb Archuleta	West Linn High School	Jeff Bilyeu
U.S. Air Force Outstanding Project	U.S. Air Force	MyInsul.in: Decision Support for Inpatient Physicians Managing Hyperglycemia	Annelise Cummings, Alexander Harding	Cleveland High School	Ronda Royal, Ph.D.
Outstanding Use of the International System of Units	U.S. Metric Association	The Efficacy of Aloe barbadensis in Inhibiting Glucose Uptake in 3T3 Cells	Lauren Brenner	Oregon Episcopal School	Bevin Daglen
Outstanding Use of the International System of Units	U.S. Metric Association	An Investigation of the Impact of PEM Fuel Cell Flow Field Plate Geometry and Design Using CFD Modeling and Simulation	Vijay Edupuganti	Oregon Episcopal School	Bevin Daglen
U.S. Regional Stockholm Junior Water Prize	Water Environment Federation	Holden Creek recovery based on macro-invertebrates	Brenten Anderson	Tillamook High School	Clair Thomas
Outstanding Project by an 11th Grade Student	Yale University Science and Engineering Association	Synthesis and Properties of New Antimalarial Drugs	Sovijja Pou	Jesuit High School	Sovitj Pou

		Di-Adamantane Amine			
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High School Category Awards

Category	Place	Title	Student List	Organization	Adult Sponsor
Animal Sciences	First Place	The Effects of Environmental Contaminants on Male Betta Fish Aggression	Danielle Shapira, Anisha Adke	Catlin Gabel School	Veronica Ledoux
Animal Sciences	Second Place	The Effect of Food Source Height on the Feeding Behavior of Common Northwest Birds	Sam LeFeber	Oregon Episcopal School	Peter Langley
Animal Sciences	Third Place	The effects of fitness supplements on the mass of female mice	Sebastian Singleton	Health and Science High School	Leigh Morlock
Behavioral and Social Science	First Place	Mental activity and time perception	Max DeKock	Bend Science Station	David Bermudez
Behavioral and Social Science	Second Place	Compilation of social media political conversations, linguistic Twitter profile analysis, and media bias to accurately reflect regional political climates	Shawn Meacham	West Salem High School	Michael Lampert
Behavioral and Social Science	Third Place	The Relationship Between Quality of Sleep and Symptoms of Attention Deficit Disorder	Annie Gilbert, Kara Gilbert	Wilsonville High School	Jen Tinker
Biochemistry	First Place	Determining the Mode of Action of the Antioxidant Sericin	Holly Langley, Olivia Langley	Oregon Episcopal School	Catherine Molloseau

Biochemistry	Second Place	Beating the Disease: Resveratrol and Piperine Combination as a Potential Treatment of Alzheimer's	Anisha Das	Westview High School	Debbie Cooper
Biochemistry	Third Place	The Effects of Antimicrobials Derived from the <i>Gromphadorhina portentosa</i> on <i>E. coli</i>	Sol Summers, Savan Patel	Beaverton High School	Mike Blok
Biochemistry	Honorable Mention	Replacement of Magnesium in Chlorophyll with Alternative Metals	Dmitriy Strelkov, John Martin	Reynolds High School	Jason Larson
Cellular and Molecular Biology	First Place	Reduction of EGCG and TF-3's anti-cancer and antioxidant benefits by casein addition	Joe Hsia	Oregon Episcopal School	Peter Langley
Cellular and Molecular Biology	Second Place	Generation of Monkey Induced Pluripotent Stem Cells In The Absence Of Sox2 and C-Myc	Mina Guo	Oregon Episcopal School	Peter Langley
Cellular and Molecular Biology	Third Place	The Chemopreventative Effects of a Simultaneous Administration of Docosahexaenoic Acid and Curcumin on SKN Neuroblastoma Cells	Antonia Elsen	Oregon Episcopal School	Peter Langley
Chemistry	First Place	Synthesis and Properties of New Antimalarial Drugs Di-Adamantane Amine	Sovijja Pou	Jesuit High School	Sovitj Pou

Chemistry	Second Place	Homemade Photographic Chemicals	Cecilia Hua, Gary Lai	Oregon Episcopal School	Bevin Daglen
Chemistry	Third Place	What's your angle? A Hemispheric Refractory Dish as a Method for Calculating Salinity	Brandon Orozco	Cleveland High School	Ronda Royal, Ph.D.
Computer Science	First Place	Improving Computer Vision and 3D Environment Object Recognition in Real-Time Using Kinect Sensors	Akash Krishnan	Oregon Episcopal School	Steve Decker
Computer Science	Second Place	Computer Aided Diagnosis of Melanoma Cancers	Elizabeth Zhao	Jesuit High School	Helen Pang
Computer Science	Third Place	Discovering Clueless Puzzles	Anika Raghuvanshi	Jesuit High School	Arvind Kumar
Computer Science	Honorable Mention	Automated Classifications of Online Comments	David Solti	Oregon Episcopal School	Catherine Molloseau
Earth Science	First Place	Assessing Dust Collection Methods for Future Investigation of Airborne Extremophiles	Hannah Burke, Alexis Austin	Wilsonville High School	Jay Schauer
Earth Science	Second Place	The Effect of Global Warming on Hurricanes	Elizabeth DeLozier, Timothy DeLozier	Gresham High School	Kathy Childress
Energy and Transportation	First Place	Driving the Market for Renewable Energy Growth: Engineering a Means of Sustainable Energy Supplementation for	Jenna Wiegand	Wilsonville High School	Jay Schauer

		Hybrid-Electric Vehicles			
Energy and Transportation	Second Place	An Investigation of the Impact of PEM Fuel Cell Flow Field Plate Geometry and Design Using CFD Modeling and Simulation	Vijay Edupuganti	Oregon Episcopal School	Bevin Daglen
Energy and Transportation	Third Place	Factors Affecting the Production of Biocrude from <i>Cytisus scoparius</i>	Kestrel Bailey	Tillamook High School	Clair Thomas
Engineering: Electrical and Mechanical	First Place	Fast Prototyping of Constraint Satisfaction Problem Architecture Using FPGAs	Alan Cheng	Southridge High School	Bradford Hill
Engineering: Electrical and Mechanical	Second Place	A Novel Design for the Enhancement of Anti-Reflection in Crystalline Photovoltaic Cells	William Yuan	Westview High School	Debbie Cooper
Engineering: Electrical and Mechanical	Third Place	Analyzing the effects of chlorine-washed sand in a biosand filter	Medha Pulla, Shradha Pulla, Aimen Khakwani	Harriet Tubman Leadership Academy for Young Women	Shannon Kittrick
Engineering: Materials and Bioengineering	First Place	MyInsul.in: Decision Support for Inpatient Physicians Managing Hyperglycemia	Annelise Cummings, Alexander Harding	Cleveland High School	Ronda Royal, Ph.D.
Engineering: Materials and Bioengineering	Second Place	Determining the Properties of TiO ₂ Nanoparticles to Improve the Efficiency of Photoelectrochemical Cells	Ayush Gupta	Oregon Episcopal School	Bill Lamb

Engineering: Materials and Bioengineering	Third Place	Alumina Nanoparticle Mediated Pathways in Cancer Cells	Amber Tang	Maxim Integrated Products, INC	Ron Tang
Environmental Analysis and Effects	First Place	Effects of Electromagnetic Fields on Virulence and Viability of K-12 E. coli	Andrew Chen	Beaverton High School	Mike Blok
Environmental Analysis and Effects	Second Place	The Toxicological Effect of Emissions from Building Materials on Lung Health	Naomi Shah	Sunset High School	Chetan Shah
Environmental Analysis and Effects	Third Place	The Affect of MTBE on Common Algae Species	Maddie Mosscrop	Oregon Episcopal School	Catherine Molloseau
Environmental Management	First Place	Optimizing the Microbial Fuel Cell- Microbial Electrolysis Cell Coupled System for Sustainable Hydrogen Gas Production, Electricity Generation, and Improved Wastewater Treatment	Ajay Krishnan	Oregon Episcopal School	Bevin Daglen
Environmental Management	Second Place	The Coagulation and Flocculation System in the Treatment of Printing and Dyeing Sewage	Howard Xu	Oregon Episcopal School	Bevin Daglen
Environmental Management	Third Place	Biochar Carbon Sequestration: The Effect of Particle Size and Feedstock on Physical and	Meghana Rao	Jesuit High School	Anita Rao

		Chemical Stability (a 2nd year study)			
Environmental Management	Honorable Mention	A Novel Application of Arundo Donax Biochar for Soil Amendment to Reduce Nitrous Oxide Emissions and Enhance Plant Growth	Meredith Loy	Oregon Episcopal School	Catherine Molloseau
Mathematical Sciences	First Place	Small Geometric Progressions Modulo N for Deterministic Polynomial Selection	Aishwarya Vardhana	Jesuit High School	Ananda Vardhana
Mathematical Sciences	Second Place	Complexity of Interlocking Polyominoes	Sidharth Dhawan	Westview High School	Debbie Cooper
Mathematical Sciences	Third Place	Graph Theory and Locality Sensitive Hashing for DICOM Image Analysis	Markus Woltjer	Wilsonville High School	Jim O'Connell
Mathematical Sciences	Honorable Mention	Music: Math to my ears-decoding the personality of music	Uma Doshi	Jesuit High School	Satish Doshi
Medicine and Health Sciences	First Place	The Effect of Chemotherapy on Mouse Oligodendrocytes	Doug Goldstein	Lincoln High School	Dr. Dave Hamilton
Medicine and Health Sciences	Second Place	The Effects of Hypoxia on Human Adipose Tissue Inflammation and Metabolism	Adarsh Bhatt	Westview High School	Debbie Cooper
Medicine and Health Sciences	Third Place	Understanding the Role of JAK2V617F in Inducing Myeloid-Specific Malignancies	Meghana Kalavar	Jesuit High School	Jyothi Kalavar

Medicine and Health Sciences	Honorable Mention	Magnetic Iron Oxide-Facilitated Mobility of Cells and Applications in Renal Tubular Cell Recovery	Mukund Raguram	Oregon Episcopal School	Catherine Molloseau
Microbiology	First Place	Characterization of the Relationship between Pseudomonas aeruginosa Acyl-homoserine Lactone Based Quorum Sensing and Innate Macrophage Function in vitro	Spencer Chang	West Linn High School	Jonathan Davies
Microbiology	Second Place	The Effect UV-C Light on E. Coli	Emily Schnepf	Gresham High School	Kathy Childress
Microbiology	Third Place	The Effect of Natural Antibiotics vs Amoxicillin on the Zone of Inhibition of E-Coli K-12 Bacteria	Lexie Bennett, Anna Fernandez	Wilsonville High School	Jen Tinker
Microbiology	Honorable Mention	The Disinfestation and In Vitro Isolations of Rhododendron Catawbiense, Rhododendron x Hybrid and Landscape Rhododendron Leaves to Obtain Their Endophytes	Zaina Zaidan	Wilsonville High School	Jim O'Connell
Microbiology	Honorable Mention	Is it safe to reuse plastic water bottles?	Sarah Phan	Franklin High School	Merritt Sansom
Physics and Astronomy	First Place	Shining Like the Sun: A Quantum Mechanical Study of White-Light LEDs	Valerie Ding	Catlin Gabel School	Andrew Merrill

Physics and Astronomy	Second Place	Does the Interdependent Relationship Between Black Holes And Their Galaxies Rise to the Level of A Physical Principle?	Amiel Patton-Hall	Oregon Episcopal School	Bevin Daglen
Physics and Astronomy	Third Place	Induction Heating of Super Paramagnetic Iron Nanoparticles with Variable Concentrations	Peter Graham	Oregon Episcopal School	Catherine Molloseau
Physics and Astronomy	Honorable Mention	Low Cost X-Ray Spectroscopy as a Non-Destructive Metal Surface Analysis	Katie Reinders	Oregon Episcopal School	Bevin Daglen
Plant Sciences	First Place	Feasibility of creating quality silage in small quantities	Ruth Johnston	Tillamook High School	Clair Thomas
Plant Sciences	Second Place	The Effect of Prey Presence on the Ability of Different Areas of the Pinguicula Leaf to Digest Prey	Alison Willie	Oregon Episcopal School	Peter Langley
Plant Sciences	Third Place	Comparative study of the ethylene release of different kinds of fruit and its effect on the ripening of apples	Mira Reichman	Oregon Episcopal School	Catherine Molloseau
Plant Sciences	Honorable Mention	The Effect of Aloe barbadensis Gel and Liquid on Jonagold Apple Shelflife	Catherine Bayer	Hillsboro High School	Brian Nauert