Special Award	Award Sponsor	Exhibit No	Title	Student List	Organization	Adult Sponsor
Best of Fair-Life	Students of Dr. Bill Lamb	HS-PL-0020	Seed Morphology and Dispersal of Achyrachaena mollis	Rachel Warner	Oregon City High School	Elizabeth Scott
Best of Fair-Physical	Students of Dr. Bill Lamb	HS-EE-0003	ASCEND: Aqueous Spectrometric Copper-Electrolytic Nutrient Detector	Aditi Bhaskar	Wilsonville High School	C.J. Koll
Biophysics Award	Biophysical Society	HS-CM-0004	The Effects of Various Wavelengths of Light on Lipid Content of Saccharomyces Cerevisiae	Chandra Shriya Myneni	Oregon Episcopal School	Peter Kimball
Cultivating Empathy for the Earth Award	National Geographic Society	HS-EE-0016	Smart Wildlife Sentinel (SWS): Preventing Wildlife-Vehicle Collisions and Monitoring Road Ecology with Embedded IoT Systems and Deep Learning	Alan Ma	Jesuit High School	Lara Shamieh
IEEE Special Awards	IEEE Oregon	HS-EE-0016	Smart Wildlife Sentinel (SWS): Preventing Wildlife-Vehicle Collisions and Monitoring Road Ecology with Embedded IoT Systems and Deep Learning	Alan Ma	Jesuit High School	Lara Shamieh
NASA Earth System Science Award	NASA	HS-VE-0067	Evacuation Strategies for Wildfires	Sohan Govindaraju	Jesuit High School	Lara Shamieh
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	HS-MA-0009	Quantum Search for Optimal ESOP Forms to Exploit Emerging Computing Technologies	Hrithik Ketineni	Westview High School	Hrushi Ketineni
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	HS-CO-0011	The Nuts and Bolts of Encryption	Lauren Gault	West Linn High School	Brandon Smith
Naval Excellence in Science and Engineering Award	Office of Naval Research, US Navy and Marine Corps	HS-MI-0005	Mush-Room for Improvement	Yuankai Gao	Oregon Episcopal School	Bettina Gregg
NOAA's Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	HS-VE-0033	What are the effects of cyanobacteria blooms on primary productivity, toxicity, and microorganisms?	Uma Grover, Melinda Lin	West Linn High School	Julie McDevitt
NOAA's Taking the Pulse of the Planet	National Oceanic and Atmospheric Administration	HS-EN-0026	Metal Extraction in Desalination Plants	Theodore Guo	Jesuit High School	Lara Shamieh
OSU General Scholarship	Oregon State University	HS-CH-0037	Effectiveness of Chemicals Carveol and Sodium Stearate on the Suspension of Key Petroleum Products in Seawater	Conrad Kelsay	Oregon Episcopal School	Bettina Gregg
OSU General Scholarship	Oregon State University	HS-VE-0017	The Effect of Salvage Logging on Burned Ecosystems	Rand Freres	Oregon Episcopal School	Bettina Gregg

			in Oregon's Santiam Canyon			
OSU General Scholarship	Oregon State University	HS-EB-0038	Creating an Artificial Pancreas Prototype	Ryder Lewis	Trinity Lutheran School	Thomas Stueve
Outstanding Applied or Practical Chemistry Project by a Junior or Senior	Portland Industrial Chemists' Association/American Chemical Society	HS-EE-0003	ASCEND: Aqueous Spectrometric Copper-Electrolytic Nutrient Detector	Aditi Bhaskar	Wilsonville High School	C.J. Koll
Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	HS-PL-0002	Testing to What Extent Salinity Affects Crop Yield and Overall Plant Health in Rice	Grant Button	Oregon Episcopal School	Bettina Gregg
Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	HS-VE-0030	The impact of Arthrospira platensis on nitrogen concentration and pH in fish effluent	Sydney Taylor	West Linn High School	Daniel Blankenship
Outstanding Aquatic Related Environmental Science Project	Lake Oswego Corporation	HS-CH-0029	Synergistic Effect of Boron-nitrogen Dual-doped Carbon Electrodes for Cost-effective CO2 Reduction	Shreemoyee Saha	Sunset High School	Korin Riske
Outstanding Chemistry Project	American Chemical Society, Portland Section	HS-CH-0029	Synergistic Effect of Boron-nitrogen Dual-doped Carbon Electrodes for Cost-effective CO2 Reduction	Shreemoyee Saha	Sunset High School	Korin Riske
Outstanding Geoscience Project	Association Of Women Geoscientists	HS-VE-0013	The Effect of Sulfuric Acid Concentration on Phaseolus vulgaris	Ava Ebbutt	Mountainside High School	Lesley Stevens
Outstanding Natural Resources Science Project	Pacific NW Research Station, USDA Forest Service	HS-VE-0013	The Effect of Sulfuric Acid Concentration on Phaseolus vulgaris	Ava Ebbutt	Mountainside High School	Lesley Stevens
Outstanding Project by an 11th Grade Student	Yale Science and Engineering Association, Inc.	HS-EN-0038	Plausibility of Cellulose Fibers from Symbiotic Culture of Bacteria and Yeast As a Primary Ingredient in Manufacturing (more) Sustainable Packaging	Emily Song, Minhkhoa Truong	International School of Beaverton	Jaimie Yee
Outstanding Project in In Vitro Biology	Society for in Vitro Biology	HS-MI-0004	Using E.coli as a pathogen indicator to identify potential hazards caused by wildfire bacterial runoff	Madeleine Raymond	Oregon Episcopal School	Bettina Gregg
Outstanding Research in Psychology	American Psychological Association	HS-BE-0019	Cross Lateral and Bilateral Stimulation	Megan Whitt, Mia Williams, Jenna Campbell	Wilsonville High School	Thomas Schuster
Outstanding Use of the International System of Units	U.S. Metric Association	HS-PH-0006	The Effect of the Area of the Surface on the Decay Constant of Vertical Spring-Mass Systems	Jack Jordan	Mountainside High School	Lesley Stevens
Outstanding Use of the International System of Units	U.S. Metric Association	HS-CH-0021	Temperature on the Brightness of Luminol's Chemiluminescence	Tyler Saito Takasumi	Oregon Episcopal School	Peter Kimball
Pacific Northwest	The Pacific Northwest Local	HS-EB-0031	Posture Correcting Ergonomic Chair	Samir Rampurawala	Beaverton Academy of Science and Engineering	Melissa Shell

Scientist Award	Section of AIHA					
Pacific Northwest Scientist Honorable Mention	The Pacific Northwest Local Section of AIHA	HS-PH-0008	NDRS (Noise & Drag Reduction System) Side Mirror Cap	Ronak Sameer-Asita, Paul Liu	Wilsonville High School	C.J. Koll
Pacific Northwest Scientist Honorable Mention	The Pacific Northwest Local Section of AIHA	HS-CO-0056	A Novel Neural Network-Based Approach to Predict Forest Fires using Deep Learning Algorithms	Anvi Kalidindi	Jesuit High School	Lara Shamieh
Pacific Northwest Scientist Honorable Mention	The Pacific Northwest Local Section of AIHA	HS-CO-0027	A Generationally Trained Neural Network for Autonomous Vehicle Collision Avoidance	Kofi Kim	Oregon Episcopal School	Peter Kimball
Portland State University Scholarships	Portland State University	HS-CO-0015	AI Environmental Background Noise Classification for Use in Accessibility Tools	Madeline Santoso, Kaya Hald	West Linn High School	Brandon Smith
Portland State University Scholarships	Portland State University	HS-ME-0059	A Smart, Low-Cost Device that Detects Carotid Artery Stenosis Through Intensity Variation Analysis for Cerebrovascular Accident Prevention	Aneeq Chowdhury, Ehan Masud	Sunset High School	Korin Riske
Portland State University Scholarships	Portland State University	HS-CO-0041	SOS.net: a Robust, Neuromorphic System Harnessing the Power of AI to Expedite Search-and-Rescue Missions	Nesara Shree	Jesuit High School	Lara Shamieh
Regeneron Biomedical Science Award	Regeneron	HS-ME-0059	A Smart, Low-Cost Device that Detects Carotid Artery Stenosis Through Intensity Variation Analysis for Cerebrovascular Accident Prevention	Aneeq Chowdhury, Ehan Masud	Sunset High School	Korin Riske
Regeneron ISEF Finalist - Life Science	Northwest Science Expo	HS-VE-0081	Modeling the Impacts of Daikon Cover Crop Water Storage in Dry Farming	Grace Sato, Alan Kolesnikov	West Linn High School	Geoff Bingham
Regeneron ISEF Finalist - Life Science	Northwest Science Expo	HS-PL-0020	Seed Morphology and Dispersal of Achyrachaena mollis	Rachel Warner	Oregon City High School	Elizabeth Scott
Regeneron ISEF Finalist - Life Science	Northwest Science Expo	HS-MI-0005	Mush-Room for Improvement	Yuankai Gao	Oregon Episcopal School	Bettina Gregg
Regeneron ISEF Finalist - Physical Science	Northwest Science Expo	HS-PH-0016	Skew-Axis Cylinder Lens Optical System: Novel Method of Clinical Optometry of Astigmatism, Characterization, Theoretical Modelling, and Implementation.	Alexander Plekhanov	Beaverton Academy of Science and Engineering	Melissa Shell
Regeneron ISEF Finalist - Physical Science	Northwest Science Expo	HS-EB-0043	A Novel Intent-Based Movement Prediction System That Optimizes Exoskeletons to Enhance Mobility for Cerebral Palsy Patients	Ishan Ahluwalia	Jesuit High School	Lara Shamieh

Regeneron ISEF Finalist - Physical Science	Northwest Science Expo	HS-EE-0016	Smart Wildlife Sentinel (SWS): Preventing Wildlife-Vehicle Collisions and Monitoring Road Ecology with Embedded IoT Systems and Deep Learning	Alan Ma	Jesuit High School		Lara Shamieh
Ricoh Sustainable Development Award	Ricoh Corporation	HS-CH-0029	Synergistic Effect of Boron-nitrogen Dual-doped Carbon Electrodes for Cost-effective CO2 Reduction	Shreemoyee Saha	Sunset High School		Korin Riske
Ricoh Sustainable Development Award	Ricoh Corporation	HS-EB-0020	Eco Friendly Preparation and Characterization of Chitin-Based Bioplastic from Agaricus Bisporus	Sujan Vijayraj Shadrak	Wilsonville High School		Harold Coller
Science Champion Award	U.S. Agency for International Development	HS-PL-0016	A Novel Approach to Detecting Diseases in Corn Crops using Convolutional Neural Networks	Nidhi Yadalam, Akash Ragam	Jesuit High School		Lara Shamieh
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	HS-PL-0020	Seed Morphology and Dispersal of Achyrachaena mollis	Rachel Warner	Oregon City High School		Elizabeth Scott
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	HS-BE-0018	Beyond the Nuclear Family: A Century of Representation in Images and Text of Children's Literature	Annamika Konkola	West Linn High School		Brian Delfatti
Tom Owen Award for Excellence in Statistics	Oregon Chapter of the American Statistical Association	HS-CM-0005	OncoPharML: A Machine-Learning Approach for Cancer Biomarkers Identification and Multi-Omics-Based Targeted Cancer-Drug Prediction	Darsh Mandera	Jesuit High School		Lara Shamieh
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-MA-0006	Measuring the Effects of Corporate Activism on Product Quality through Recalls in Medical Devices	Shawn Nakayama	Oregon Episcopal School		Joshua Caditz
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-VE-0083	Developing Automated Analysis in Marine Ecosystems using Comprehensible Variables in Marine Soundscape with Machine Learning	Sabrina Zhang	West Linn High School		Nancy Monson
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-VE-0033	What are the effects of cyanobacteria blooms on primary productivity, toxicity, and microorganisms?	Uma Grover, Melinda Lin	West Linn High School		Julie McDevitt
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-ME-0008	The Effect of Social Isolation on Cognition of Blaptica dubia	Yasmin Iyer	Oregon Episcopal School		Bettina Gregg
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-VE-0071	Analysis of Wildfire Risk Factors and Synthesis of Prediction Modeling	Jayden Huang	Sunset High School		Korin Riske
Tom Owen Honorable Mention	Oregon Chapter of the American Statistical Association	HS-CH-0013	Efficiently Screening the Most Abundant Bioactive Molecular Moiety: in silico Structure	Curran Jacobus	Bend Senior High		Casie Bullock

			Property Relationships of Primary Amide Bioisosteres			
U.S. Air Force Outstanding Project	U.S. Air Force	HS-EB-0031	Posture Correcting Ergonomic Chair	Samir Rampurawala	Beaverton Academy of Science and Engineering	Melissa Shell
U.S. Air Force Outstanding Project	U.S. Air Force	HS-EN-0026	Metal Extraction in Desalination Plants	Theodore Guo	Jesuit High School	Lara Shamieh
U.S. Air Force Outstanding Project	U.S. Air Force	HS-CO-0027	A Generationally Trained Neural Network for Autonomous Vehicle Collision Avoidance	Kofi Kim	Oregon Episcopal School	Peter Kimball
U.S. Air Force Outstanding Project	U.S. Air Force	HS-PH-0014	Testing the efficiencies of varying electromagnet stage timings in an Electromagnetic Coilgun	Benjamin Wrinn	Oregon Episcopal School	Peter Kimball
U.S. Regional Stockholm Junior Water Prize	Water Environment Federation	HS-VE-0081	Modeling the Impacts of Daikon Cover Crop Water Storage in Dry Farming	Grace Sato, Alan Kolesnikov	West Linn High School	Geoff Bingham
U.S. Regional Stockholm Junior Water Prize	Water Environment Federation	HS-VE-0013	The Effect of Sulfuric Acid Concentration on Phaseolus vulgaris	Ava Ebbutt	Mountainside High School	Lesley Stevens
University of Oregon Scholarships	University of Oregon	HS-MI-0035	EngrAAV: A Novel Application of Machine-Learning Guided Directed Evolution to Engineer recombinant-AAV Capsids for Increased Viral Yield	Akash Pai, Nikhil Nayak	Sunset High School	Korin Riske
University of Oregon Scholarships	University of Oregon	HS-CM-0008	Significant genetic risk factor for Rheumatoid Arthritis is inherited from Denisovan	Carissa Gerung	Jesuit High School	Lara Shamieh
Women in Engineering	IEEE Oregon	HS-CO-0041	SOS.net: a Robust, Neuromorphic System Harnessing the Power of AI to Expedite Search-and-Rescue Missions	Nesara Shree	Jesuit High School	Lara Shamieh

Category	Place	Exhibit No	Title	Student List	Organization	Adult Sponsor
Animal Sciences	First Place	HS-AN-0015	The Effect of Circulating ACTH and Insulin Hormones on Equine Temperament	Lauren Tittel	Oregon Episcopal School	Peter Kimball
Animal Sciences	Second Place	HS-AN-0025	Conditions for Photosynthetic Endosymbiosis: An Investigation of the Effects of Freshwater Acidification Using Hydra-Chlorella	Sarah Sanborn	West Linn High School	Nancy Monson
Animal Sciences	Third Place	HS-AN-0027	A Meta-Analysis of the Intelligence of Physarum Polycephalum	Jasper Gu	Sunset High School	Korin Riske
Animal Sciences	Honorable Mention	HS-AN-0021	Difference in Canine Obedience to Verbal Cues, Gestural Cues and a Combination of Both	Emmalee Leinweber	Mountainside High School	Lesley Stevens
Behavioral and Social Science	First Place	HS-BE-0018	Beyond the Nuclear Family: A Century of Representation in Images and Text of Children's Literature	Annamika Konkola	West Linn High School	Brian Delfatti
Behavioral and Social Science	Second Place	HS-BE-0013	An Investigation Into The Effect of Instrumental Playing on Typing Speed	Jocelyn Ho	International School of Beaverton	Jaimie Yee
Behavioral and Social Science	Third Place	HS-BE-0007	Social media use and self-objectification: A case study of female university students in Shanghai	Gigi Chen	Oregon Episcopal School	Bettina Gregg
Behavioral and Social Science	Honorable Mention	HS-BE-0060	Battling Reduced Attention Spans in Classrooms with Meditation: A Cognitive Study for the Betterment of Learning	Revti Dharmadhikari	Sunset High School	Korin Riske
Biochemistry and Cellular	First Place	HS-CM-0005	OncoPharML: A Machine-Learning Approach for Cancer Biomarkers Identification and Multi-Omics-Based Targeted Cancer-Drug Prediction	Darsh Mandera	Jesuit High School	Lara Shamieh
Biochemistry and Cellular	Second Place	HS-CM-0003	Integrating machine learning and experimental modeling to predict drug response and identify biomarkers to combat drug resistance in cancer	Ekansh Mittal	Westview High School	Jayesh Mittal

Biochemistry and Cellular	Third Place	HS-CM-0008	Significant genetic risk factor for Rheumatoid Arthritis is inherited from Denisovan	Carissa Gerung	Jesuit High School	Lara Shamieh
Biochemistry and Cellular	Honorable Mention	HS-CM-0012	Analysis of snRNA-seq Datasets Identifies Cell Type Changes of Depression Gene Markers in Parkinson's Patients	Ayushi Mallick	West Linn High School	Brian Delfatti
Chemistry	First Place	HS-CH-0013	Efficiently Screening the Most Abundant Bioactive Molecular Moiety: in silico Structure Property Relationships of Primary Amide Bioisosteres	Curran Jacobus	Bend Senior High	Casie Bullock
Chemistry	Second Place	HS-CH-0026	Novel Small Scale Carbon Dioxide Capture Polymer Membrane for Sudden Infant Death Syndrome Prevention	Autri Das	Sunset High School	Korin Riske
Chemistry	Third Place	HS-CH-0029	Synergistic Effect of Boron-nitrogen Dual-doped Carbon Electrodes for Cost-effective CO2 Reduction	Shreemoyee Saha	Sunset High School	Korin Riske
Chemistry	Honorable Mention	HS-CH-0037	Effectiveness of Chemicals Carveol and Sodium Stearate on the Suspension of Key Petroleum Products in Seawater	Conrad Kelsay	Oregon Episcopal School	Bettina Gregg
Computer Science and Robotics	First Place	HS-CO-0038	CompaCT: Fractal-based Heuristic Pixel Segmentation for Enhanced Lossless Compression of High-Color DICOM Medical Images	Taaha Khan	Sunset High School	Korin Riske
Computer Science and Robotics	Second Place	HS-CO-0029	Engineering a Component-Based Programming Language	Diego Frias	Oregon Episcopal School	Peter Kimball
Computer Science and Robotics	Third Place	HS-CO-0030	A Novel Approach To Early Detection and Diagnoses of Cardiovascular Disease Using Clustering and Convolutional Neural Networks	Tanay Chitlur	Westview High School	Gayathri Chitlur
Computer Science and Robotics	Honorable Mention	HS-CO-0032	Fine-Grained Emotional Paraphrasing	Justin Xie	Westview High School	Fei Xie

			along Emotion Gradients			
Computer Science and Robotics	Honorable Mention	HS-CO-0012	Identifying relationships between the gut microbiome and melanoma patients' responses to immunotherapy using machine learning techniques	Arush Goswami, Anish Goswami	Wilsonville High School	Harold Coller
Energy and Environmental Engineering	First Place	HS-EN-0038	Plausibility of Cellulose Fibers from Symbiotic Culture of Bacteria and Yeast As a Primary Ingredient in Manufacturing (more) Sustainable Packaging	Emily Song, Minhkhoa Truong	International School of Beaverton	Jaimie Yee
Energy and Environmental Engineering	Second Place	HS-EN-0032	A Novel Adversarial Autoencoder Network with Latent-Based Optimization to Design Ionic Liquids for Post-Combustion Carbon Capture	Arjun Malpani, Siddharth D'costa	Jesuit High School	Navneet Malpani
Energy and Environmental Engineering	Third Place	HS-EN-0017	Evaluating the effect Carbon Dioxide in the Atmosphere has on seeded clouds formation and duration	Abbie Jalili	West Linn High School	Julie McDevitt
Energy and Environmental Engineering	Honorable Mention	HS-EN-0003	A new appropriation of public transportation optimization and its effects	Zachary Song	International School of Beaverton	Jaimie Yee
Engineering: Bioengineering and Materials	First Place	HS-EB-0043	A Novel Intent-Based Movement Prediction System That Optimizes Exoskeletons to Enhance Mobility for Cerebral Palsy Patients	Ishan Ahluwalia	Jesuit High School	Lara Shamieh
Engineering: Bioengineering and Materials	Second Place	HS-EB-0035	Spatiotemporal-Aware Glioblastoma Multiforme Tumor Growth Modeling with Deep Encoder-Decoder Networks	Rishab Jain	Westview High School	Manisha Jain
Engineering: Bioengineering and Materials	Third Place	HS-EB-0044	An At-Home FRESH 3D Printing Workflow for Tangible Disease Modeling	Liam Aranda-Michel	Lake Oswego High School	Keith Grosse
Engineering: Bioengineering and Materials	Honorable Mention	HS-EB-0018	Extracting Phenolic Compound, Ellagic Acid, from Himalayan Blackberries to Create a Non-	Simone Del Carlo, Charlie An	West Linn High School	Nancy Monson

			Toxic, Limited Waste, Fire Retardant			
Engineering: Bioengineering and Materials	Honorable Mention	HS-EB-0028	The Relationship Between Wood Type and Carbon Monoxide Emissions when Burned	Catherine Gewecke	Oregon Episcopal School	Peter Kimball
Engineering: Electrical and Mechanical	First Place	HS-EE-0003	ASCEND: Aqueous Spectrometric Copper-Electrolytic Nutrient Detector	Aditi Bhaskar	Wilsonville High School	C.J. Koll
Engineering: Electrical and Mechanical	Second Place	HS-EE-0016	Smart Wildlife Sentinel (SWS): Preventing Wildlife-Vehicle Collisions and Monitoring Road Ecology with Embedded IoT Systems and Deep Learning	Alan Ma	Jesuit High School	Lara Shamieh
Engineering: Electrical and Mechanical	Third Place	HS-EE-0019	A novel device for rapid detection of polycyclic aromatic hydrocarbons to increase superfund site clean-up efficiency	Suhaani Garg	West Linn High School	Julie McDevitt
Engineering: Electrical and Mechanical	Honorable Mention	HS-EE-0011	TriM: Modular, Modern, & Multipurpose 3D-printed Aircraft	Jesse Hayworth	Wilsonville High School	C.J. Koll
Environmental and Earth Sciences	First Place	HS-VE-0033	What are the effects of cyanobacteria blooms on primary productivity, toxicity, and microorganisms?	Uma Grover, Melinda Lin	West Linn High School	Julie McDevitt
Environmental and Earth Sciences	Second Place	HS-VE-0081	Modeling the Impacts of Daikon Cover Crop Water Storage in Dry Farming	Grace Sato, Alan Kolesnikov	West Linn High School	Geoff Bingham
Environmental and Earth Sciences	Third Place	HS-VE-0027	The Degradation of Polystyrene and Polyethylene Through Bacterial-Fungus Interactions and Tenebrio Molitor	Athena Hsu-Chen, Etti Teherani-Ami	Oregon Episcopal School	Bettina Gregg
Environmental and Earth Sciences	Honorable Mention	HS-VE-0083	Developing Automated Analysis in Marine Ecosystems using Comprehensible Variables in Marine Soundscape with Machine Learning	Sabrina Zhang	West Linn High School	Nancy Monson
Environmental and Earth Sciences	Honorable Mention	HS-VE-0030	The impact of Arthrospira platensis on nitrogen concentration and pH in fish effluent	Sydney Taylor	West Linn High School	Daniel Blankenship
Mathematical Sciences	First Place	HS-MA-0003	Using Policy Gradient RL	Anay Aggarwal	Jesuit High School	Lara Shamieh

			Algorithms to Solve the Maximum Independent Set Problem			
Mathematical Sciences	Second Place	HS-MA-0009	Quantum Search for Optimal ESOP Forms to Exploit Emerging Computing Technologies	Hrithik Ketineni	Westview High School	Hrushi Ketineni
Mathematical Sciences	Third Place	HS-MA-0004	A Novel Entropy Based Heuristic Algorithm For Solving The Maximum Matching Problem In K-partite Hypergraphs	Arjun Agarwal	Jesuit High School	Lara Shamieh
Mathematical Sciences	Honorable Mention	HS-MA-0006	Measuring the Effects of Corporate Activism on Product Quality through Recalls in Medical Devices	Shawn Nakayama	Oregon Episcopal School	Joshua Caditz
Medicine and Health Sciences	First Place	HS-ME-0059	A Smart, Low-Cost Device that Detects Carotid Artery Stenosis Through Intensity Variation Analysis for Cerebrovascular Accident Prevention	Aneeq Chowdhury, Ehan Masud	Sunset High School	Korin Riske
Medicine and Health Sciences	Second Place	HS-ME-0042	SAFE: A low cost Sensor-fusion based Assessment and prediction solution of Fall risk for the Elderly	Kavish Patel	Jesuit High School	Lara Shamieh
Medicine and Health Sciences	Third Place	HS-ME-0058	A Behavioral Study: How does the genotype APL-1 affect the touch sensitivity of Caenorhabditis elegans?	Ava Deng	Oregon Episcopal School	Joshua Caditz
Medicine and Health Sciences	Honorable Mention	HS-ME-0050	DermaSkan: Using Convolutional Neural Networks To Detect and Prevent Skin Cancer in Underrepresented Communities By Using an Android App	Emma Nordstrom	Trinity Lutheran School	Thomas Stueve
Medicine and Health Sciences	Honorable Mention	HS-ME-0036	Neural Video Synthesis for Safer Coronary Angiography Imaging	Yuxuan Liu	Mountainside High School	Lesley Stevens
Microbiology	First Place	HS-MI-0005	Mush-Room for Improvement	Yuankai Gao	Oregon Episcopal School	Bettina Gregg
Microbiology	Second Place	HS-MI-0035	EngrAAV: A Novel Application of Machine-Learning Guided Directed Evolution to Engineer recombinant-AAV Capsids for	Akash Pai, Nikhil Nayak	Sunset High School	Korin Riske

			Increased Viral Yield			
Microbiology	Third Place	HS-MI-0016	Inhibiting Bacterial Quorum Sensing Through the use of Phytochemicals	Anthony Herrera-Alonzo, Henri Villenueve, Soren Tucker	Wilsonville High School	Thomas Schuster
Microbiology	Honorable Mention	HS-MI-0015	How do food additives affect beneficial gut bacteria?	Brooklyn Carr Heuer	West Linn High School	Megan Mandel
Physics and Astronomy	First Place	HS-PH-0016	Skew-Axis Cylinder Lens Optical System: Novel Method of Clinical Optometry of Astigmatism, Characterization, Theoretical Modelling, and Implementation.	Alexander Plekhanov	Beaverton Academy of Science and Engineering	Melissa Shell
Physics and Astronomy	Second Place	HS-PH-0006	The Effect of the Area of the Surface on the Decay Constant of Vertical Spring-Mass Systems	Jack Jordan	Mountainside High School	Lesley Stevens
Physics and Astronomy	Third Place	HS-PH-0008	NDRS (Noise & Drag Reduction System) Side Mirror Cap	Ronak Sameer-Asita, Paul Liu	Wilsonville High School	C.J. Koll
Plant Sciences	First Place	HS-PL-0020	Seed Morphology and Dispersal of Achyrachaena mollis	Rachel Warner	Oregon City High School	Elizabeth Scott
Plant Sciences	Second Place	HS-PL-0018	Novel Robotic Solution for Detection and Mapping of Phytophthora Infestans via Machine Learning and Mapping Technologies	Ashank Shah	Sunset High School	Korin Riske
Plant Sciences	Third Place	HS-PL-0019	Exploring the effects of smoke on Ponderosa Pine (Pinus ponderosa)	Connor Huet, Tristan Huet	Bend Science Station	David Bermudez
Plant Sciences	Honorable Mention	HS-PL-0016	A Novel Approach to Detecting Diseases in Corn Crops using Convolutional Neural Networks	Nidhi Yadalam, Akash Ragam	Jesuit High School	Lara Shamieh