CREST-JANE GOODALL SCIENCE SYMPOSIUM HS ISEF 2018 AWARD DECISIONS

THREE SETS OF AWARDS: CATEGORY PLACEMENT, SPECIAL AWARDS, AND BEST OF FAIR

students highlighted in green will be attending the Northwest Science Expo (state fair) to present/compete in

CATEGORY AWARDS

Behavioral Sciences: Cognitive		
1st	Cassidy Paasch	*Children's choice to deceive*
2nd	Jacob Balin, Curtis Olels	*The Effect of Music on Focus*
3rd	Chloe Clarke, Sara Hutchins, Siena Dorman	*Millennials/Generation Z ~ The dependency on cell phones and the lack of self control around them*
Hon. Ment.	Kennedy Waible, Jessica Caulk	*Mental Fatigue affecting Reaction Time*
Promising Young Scientist	Derek Valentine, Thor Severson	*How Does Mental Practice Help Your Performance*

Behavioral Sciences: Social		
1st	Coleman Henry	*Effect of Siblings on Depressive Tendencies*
2nd	Haley Stahl, Sydney Burns	*The effect that plants have on student test scores*
3rd	Reem Alharithi, Amelia Staats	*The Effects of Brand Names on Adolescents*
Hon. Ment.	Jake Heinonen, Kevin Wang, Mitchell Stewart	*The Effect of Club Participation on a Student's GPA*
Promising Young Scientist	Ireland Gomes	*Post-concussion social outcomes*

Bioengineering and Materials Sciences		
1st	Nathan Tidball	*Single Chamber MFC: Role of Extracellular Phosphate on Heavy Metal Precipitation*
2nd	John Thatcher, Brandon Wied	*Synthetic Bamboo For urban search and rescue*
3rd	Anais Kolesnikov, Hannah Gloster	*Save Our Skin*
Hon. Ment.	Elijah Cirioli, James Nicholson	*Using near-infrared spectroscopy to non-invasively measure blood glucose in diabetics*
Promising Young Scientist	Shannon Groppe	*Concussion Helmet*

Chemistry		
1st	Katarina Pejcinovic	*Engineering Soybean Shells into a Functional Bioplastic*
2nd	Jared Wieland	*Polyacrylamide: a Revolutionary Method of Water Distillation*
3rd	Casey Culbertson	*Improving the efficiency of Electrolysis of Water for Hydrogen Gas Production*
Hon. Ment.	Ellie Grano, Sydney Travnicek	*Shoe Grip*
Promising Young Scientist	Kullen Whittaker	*How does the pH of a Solution affect its Capillarity?*

Computer Sciences and Robotics		
1st	Parker Carlson	*Improving Machine Recognition of Handwritten Japanese Characters through a Context-Aware System*
2nd	Elijah Dodd, Jonathan Keller	*A New Autonomous Holonomic Rolling Robot*
3rd	Neel Jain	*How Secure Are Our Networks?*
Hon. Ment.	Matthew Macovsky	*Computational Identification of Fake News*
Promising Young Scientist	Meg Hoots	*Footprints in the Right Direction*
Electrical and Mechanical Engineering		
1st	Pooja Jain	*A Low Cost, Rapid Response Communication Link During a State of Emergency Using WiFi Mesh Networks*
2nd	Jessica Yu	*SmartSwimmer - A Novel Drowning Prevention System*
3rd	Caitlin McCabe	*Increasing Pedestrian Safety Through Kinetic Tiles*
Hon. Ment.	Elijah Deckon	*Bismuth Solar Cells*
Promising Young Scientist	Gabi Bean	*Improving Prosthetics*
Energy and Environmental Engineering		
1st	Hayden Wierman	*Reducing The Liquid Nitrogen Consumption of Superconducting Wires*
2nd	Davis Schmitz, Aidan Sloan, Thomas McMahon-Skates	*Novel Algal Biofuel*
3rd	Andrea Swenson	*Using Methanotrophs To Combat Man Made Methane*
Hon. Ment.	Allison Griffiths, Maddie Aldrich	*Water Saving Irrigation System*
Promising Young Scientist	Hayden Wierman	*Reducing The Liquid Nitrogen Consumption of Superconducting Wires*
Environmental and Earth Sciences		
1st	Abigail Hasler, Camille Rule	*The Effects of Limiting Nutrients on* Emiliania huxleyi *Population Growth*
2nd	Mikayla Ellsworth, Arianna Chappell	*Studying the Effect of BPA on* Drosophila
3rd	Kayla Tence	*Combating ocean acidification through water plant fertilization*
Hon. Ment.	Lauren Hurley, Alice Kang	*Saving Our Seas II Using Algae to Lower Dissolved CO2*
Promising Young Scientist	Lauren Hurley, Alice Kang	*Saving Our Seas II Using Algae to Lower Dissolved CO2*

Life Sciences		
1st	Hannah Budroe, Michelle Stevens	*Improving Coccolithophore (*Emiliania huxleyi*) Tolerance to Ocean Acidification Through Artificial Directional Selection*
2nd	Elizabeth Kness	*Predicting Overstep in Horses - Does Conformation Matter?*
3rd	Sara Hardwick	*Simulating natural selection in T*etraselmis *algae colonies.*
Hon. Ment.	Burke Robinett, Zachary Pryor	*Mesoscale habitat use by herbivores and predators in NW Oregon*
Promising Young Scientist	Katherine Mason, Katherine Kling	*Plants' Adaptations to Drought*
Medicine and Health Sciences		
1st	Rishima Mukherjee, Marlee Feltham	*Association of KIT Gene with Early-Onset Colorectal Cancer*
2nd	Anna Nielsen, Sophia Nielsen	*Are you at risk for a bad hair day?*
3rd	Varsha Karthikeyan	*In-silico identification of beta-lactamase inhibitors*
Hon. Ment.	Chloe Kuhlmann	*How Hippotherapy Improves Functional Ability of Children with Cerebral Palsy*
Promising Young Scientist	Hannah Goodman	*Hormones Effect on Planarian Regeneration*
Microbiology		
1st	Dana Zaidan, Athena Lackides	*Advancing the Science of the Treatment and Pathogenesis of Alzheimer's Disease; the Effects of Fenugreek on Biofilm Disruption*
2nd	Sophia Vahsholtz	*Can Iberin Inhibit Quorum Sensing in* P. putida*?*
3rd	Viv Kiss, Yaya Kiss	*Assessing the Effects of Hypoxia on Saccharomyces cerevisiae Mitochondrial Reproduction*
Hon. Ment.	Natalie Cha	*Do Antidepressants Hinder Mental Health?*
Promising Young Scientist	Ashley Chon	*Dispersal Methods of Pathogens Within Pig Lungs*
Physics & Mathematics		
1st	Raymond Berry	*Uniform Random Number Generation with Bounded Termination*
2nd	Haydn Maust	*Statistical Analysis of Academic Writing by Grade Level*
3rd	Casey Colley	*Affect of an Aging Population on the Economy*
Hon. Ment.	Aileen Converse, Grace Converse	*Is Bitcoin the New Gold? Predicting the Future of Bitcoin as a Currency using Pattern Analysis of Japanese Candlestick Charts*
Promising Young Scientist	Jakob Conner	*Absorption of Radiation of Different Household Materials*

SPECIAL AWARDS

American Meteorological Society	Evan McKinley	*The Efficacy of Chicken Fat in Predicting the Weather*

American Psychological Association	Cassidy Paasch	*Children's choice to deceive*
Association of Women in Geosciences	McKenna Bonn-Savage	*The Correlation of Rocks and Lichens*
Arizona State University Walton Foundation Sustainability Award	Jared Wieland	*Polyacrylamide: a Revolutionary Method of Water Distillation*
	Davis Schmitz, Aidan Sloan, Thomas McMahon-Skates	*Novel Algal Biofuel*
Biophysics Award, $100	Joshua Willson	*How can we use substances other than antibiotics to solve major world problems*
Green Chemistry Award, $25	Jared Wieland	*Polyacrylamide: a Revolutionary Method of Water Distillation*
Intel Computer Science Excellence award, $200	Parker Carlson	*Improving Machine Recognition of Handwritten Japanese Characters through a Context-Aware System*
Mu Alpha Theta Mathematics award	Raymond Berry	*Uniform Random Number Generation with Bounded Termination*
NASA Earth Systems award	Noah Ryan-Richey	*Impact of Wildfires in the United States*
	Taylor Edwards	Frankia *and Forest Fires*
National Oceanic & Atmospheric Assn	Abigail Hasler, Camille Rule	*The Effects of Limiting Nutrients on* Emiliania huxleyi *Population Growth*
Oregon Environmental Health Association, $60	Kalia Pincock, Sinead Jones	*Methods for Improving Recycling*
OSU Engineering Scholarship, 4-yr, $1000	Hayden Wierman	*Reducing The Liquid Nitrogen Consumption of Superconducting Wires*
Oregon State U Scholarship	Parker Carlson	*Improving Machine Recognition of Handwritten Japanese Characters through a Context-Aware System*
1 year, $2000	Pooja Jain	*A Low Cost, Rapid Response Communication Link During a State of Emergency Using WiFi Mesh Networks*
Ricoh Sustainable Development Award	Kai Saito, Cameron Muresan	*3D printed instrument mouthpieces*
Best In Vitro Biology award	Nathan Tidball	*Single Chamber MFC: Role of Extracellular Phosphate on Heavy Metal Precipitation*

Best use of the International System of Units	Mikayla Ellsworth, Arianna Chappell	*Studying the Effect of BPA on* Drosophila
US Air Force Research Award	Brooklyn Stenstrom, Meredith Thomas	*Impact of High Intensity Sports on Knee Joints*
Tech kit	Elijah Dodd, Jonathan Keller	*A New Autonomous Holonomic Rolling Robot*
US Navy Research Award	Katarina Pejcinovic	*Engineering Soybean Shells into a Functional Bioplastic*
$50	Meg Hoots	*Footprints in the Right Direction*
	Nikolay Galtsev	*Earth in a Gallon Sized Bottle: Modeling DMS Geoengineering*
	Parker Carlson	*Improving Machine Recognition of Handwritten Japanese Characters through a Context-Aware System*
Best Field Knowledge	Camryn Pettenger-Willey	*Identifying Terrestrial Nitrogen Fixing Genera of Cyanobacteria*
Best Experimental Design	Sydney Byun	*The Effect of Alanine on the Rate of Stem Cell Regeneration*
	Sophia Somerscales, Amanda McDougal	*The Effect of Crude Oil Exposure on the Growth of* Saccharomyces cerevisiae
Best display board - 'analog'	Camryn Pettenger-Willey	*Identifying Terrestrial Nitrogen Fixing Genera of Cyanobacteria*
Best display board - digital	Abigail Hasler, Camille Rule	*The Effects of Limiting Nutrients on* Emiliania huxleyi *Population Growth*
Best use of Statistical Analysis	Ainsley Like	*Are People That Wear Glasses Smarter?*
Innovation in Materials Science	Caitlin McCabe	*Increasing Pedestrian Safety Through Kinetic Tiles*
Most Creative Project	Anja Reeber, Isaac Reeber	*Origami Beehive*
Multidisciplinary Research Award, $125	Makayla Bruce, Justin Bruce	*Embracing Scoliosis*
Best Logbook award	Hayden Wierman	*Reducing The Liquid Nitrogen Consumption of Superconducting Wires*
Women in Engineering Award, $125	Caitlin McCabe	*Increasing Pedestrian Safety Through Kinetic Tiles*
Paul Sherman Award Commemorates WLHS teacher, for enthusiasm for	Zoe Owen	*Beneficial Bacteria for the Appendix*
	Maxwell Wilson	*The Effects Of a restrictive Diet On The Expression Of Huntington's Disease (HD)*

scientific discovery, $25	Nathan Sostrin	*Creating a Simulator for Celestial Body's Gravities*
	Kaedyn Murphy	*Portland, Oregon Nuclear Attack Evacuation Plan*
Stockholm Jr. Water Prize, invitation to state conference	Madeleine Itschner	*The effect of global warmings rising temperatures on Pacific Northwest wetland microbial ecology*
	Lauren Hurley, Alice Kang	*Saving Our Seas II Using Algae to Lower Dissolved CO2*
	Isabella Kleiner	*Testing Of Zooxanthallae*
Yale Engineering Award	Jessica Yu	*SmartSwimmer - A Novel Drowning Prevention System*
BEST OF FAIR		

FINALISTS - Presenting their pro-jects at the International Science & Engineering Fair in May	Hannah Budroe, Michelle Stevens	*Improving Coccolithophore (*Emiliania huxleyi*) Tolerance to Ocean Acidification Through Artificial Directional Selection*
	Nathan Tidball	*Single Chamber MFC: Role of Extracellular Phosphate on Heavy Metal Precipitation*
	Pooja Jain	*A Low Cost, Rapid Response Communication Link During a State of Emergency Using WiFi Mesh Networks*
	Rishima Mukherjee, Marlee Feltham	*Association of KIT Gene with Early-Onset Colorectal Cancer*
OBSERVERS - attend the inter-national fair, do not present	Katarina Pejcinovic	*Engineering Soybean Shells into a Functional Bioplastic*
	Hayden Wierman	*Reducing The Liquid Nitrogen Consumption of Superconducting Wires*