SLVSEF 2017 - Senior Division					
Category and Rank	Name	School	Project Title		
Behavioral & Social Sciences - First	Alex Sun & Emma Sun	Hillcrest High (Alex) The Waterford School (Emma)	UNDERSTANDING "COMPASSION FADE"		
Behavioral & Social Sciences - Second	Elainna Ng	Juan Diego Catholic High	Effects of Diet-Induced Binge Eating on Behavioral Control of Feeding		
Behavioral & Social Sciences - Third	Mia Yu	West High	Nonresident father involvement and child wellbeing: A national prospective birth cohort study		
Behavioral & Social Sciences - Fourth	Angela Pham	AMES High School	Emotional Super Bowl		
Biology & Biochemistry - First	Tyrell Floyd & Anna Mancera	Salt Lake Center for Science Education (SLCSE)	The Effect of Environmental Factors on the Upregulation of Dicer-2 RNA and Development of Viral Entities within Dicer-1 Inhibited Tetrahymena Cells		
Biology & Biochemistry - Second	Daeun Sung	West High	Directing Neural Stem Cell Differentiation through Engineering the Extracellular Matrix		
Biology & Biochemistry - Third	Vismaya Kharkar	West High	Cellular and Genetic Mechanisms Connecting Biological Rhythms and Touch-Based Response in C. elegans		
Biology & Biochemistry - Fourth	Olivia Slaughter	Salt Lake Center for Science Education (SLCSE)	Picky Parasites- An Investigation of Columbicola columbae Host Choice		
Chemistry - First	Jonathan Waung	Juan Diego Catholic High	Chemistry on Carbon Nanoparticles		
Chemistry - Second	Grace Wang	West High	An Eggsperiment: Removal of Copper from Aqueous Solutions using Eggshell Wastes		
Chemistry - Third	Dillon Boone	Salt Lake Center for Science	The Optimization of Electrolysis		
	Nihal Kariparduc & Zachary	Education (SLCSE)	The optimization of Electrostysis		
Chemistry - Fourth	Maynard	Beehive Academy	Can Mineral Oil Solidify Motor Oil? The Correlation Between Presence of Radon Gas in		
Earth & Environmental Sciences - First	Julia Sherman	West High	Residences and Diagnosis of Type 1 Diabetes Evaluating Salt Lake County Watershed [Phase 1:		
Earth & Environmental Sciences - Second	Tara Horscroft	Entheos Academy	Utilizing a low cost method to detect polluted surface water outfalls and misconnected drainage on the Jordan River]		
Earth & Environmental Sciences - Third	Mason Buxton	American Preparatory Academy	The Problem of Particulates Produced by Fuels Used in Small Engines		
Earth & Environmental Sciences - Fourth	Kaatje Fisk	Salt Lake Center for Science Education (SLCSE)	Minimizing the Spread of Invasive Species Using Improved Watercraft Monitoring Technology		
Energy: Chemical & Physical - First	Tanisha Martheswaran	The Waterford School	Waste Embraced 2.0: A Novel Study of the Effects of Optimized Struvite Precipitation on Biogas Production and Resource Recovery from Municipal Landfill Leachate and Wastewater Centrate		
Energy: Chemical & Physical - Second	Isaac Bromley-Dulfano	AMES High School	Puzzle Panels		
Energy: Chemical & Physical - Third	Anna Tang	West High	Semiconductor Capacitors and its Application in Battery Technology		
Energy: Chemical & Physical - Fourth	Tristan Lopez Isaac Christensen & Evan	AMES High School Salt Lake Center for Science	Catalytic Converters		
Engineering: Civil & Environmental - First	Culer	Education (SLCSE)	Exploring the Economic Efficiency of Solar Power		
Engineering: Civil & Environmental - Second	Amanda Thatcher	Highland High	The Carbon Sequestrator		
Engineering: Civil & Environmental - Third	Gussie Scott	Salt Lake Center for Science Education (SLCSE)	Using Stable Nitrogen Isotope Spectrometry to Analyze Elms and Phragmites as Potential Environmental Indicators for Nitrogen Pollution in the Jordan River		
Engineering: Civil & Environmental - Fourth	Divyam Goel	West High	Resource recovery from liquid waste: A strategy for ensuring food security		
Engineering: Electrical & Computer Science - First	Cassandra Ivie	Entheos Academy	Coding "The Incredible Machine: Creating a simplified coding system for engineering education		
Engineering: Electrical & Computer Science - Second	Jaxton Maez	Stansbury High School	Wireless Power transfer		
Engineering: Electrical & Computer Science - Third	lan Van Leuven & Bailey Landis	Treasure Mountain Jr. High	Card Crash		
Engineering: Electrical & Computer Science - Fourth	Emma Wasson & Jaren Hudson	Blue Peak High School	Swarm Robotics		
Engineering: Materials & Biomedical - First	Alexander Cheng	Hillcrest High	Analysis of Retinal Fundus Images to Detect Macular Degeneration Using Machine Learning Methods		
Engineering: Materials & Biomedical - Second	Mitchell Simmons	West High	Exploring Sustainable Materials Made From Waste Products and Their Applications		
Engineering: Materials & Biomedical - Third	Bjorn Kierulf	Salt Lake Center for Science Education (SLCSE)	An Evaluation of the Possibility of Using Alternative Materials in Swamp Coolers		
Engineering: Materials & Biomedical - Fourth	John York	AMES High School	Clot		
Engineering: Mechanical - First	Vikrant Ragula & Kanishka Ragula	Skyline High	A Robotic Approach to De-escalating Police/Civilian Interactions During Traffic Stops		
Engineering: Mechanical - Second	Keyan Adams	American Preparatory Academy	The Elimination of Catching Edges for Beginner Snowboarders		
Engineering: Mechanical - Third	Jack Shuckra	West High	Ideal Tire Pressure for the Junior Rider		
Engineering: Mechanical - Fourth	Jaspar Ruegemer	Treasure Mountain Jr. High	How Piezoelectric Crystals can produce Electric Energy in Everyday Life		

		An Anti-Inflammatory Drug with Anti-Cancer
Chelsea Li	West High	Properties: Aspirin Inhibits Motility and Colony
		Formation of Melanoma Cells and Transformed
Sai Parsawar	Hillcrest High	Melanocytes MS of MS: An Investigation of the Cerebrospinal Fluid
		Proteome of Multiple Sclerosis Patients Using Bruker
		maXis II ETD Mass Spectrometry
Jessie Zhu	Juan Diego Catholic High	Preclinical Evaluation of Cannabidiol for Seizures and
		Comorbidities
Cynthia Chen & Keven Zhang	West High	Optogenetic Recording of Cultured TRPV1-
		Cre/GCaMP6+ DRG Neurons to Study Muscle Fatigue
		and Pain
Annie Yun	West High	Using Machine Learning to Identify Asteroid
		Collisional Families
Timmanee Loveless	West High	Where's that confounded bridge?: The Effect of
		Bridge Placement on Excited Harmonics from a
		Stringed Instrument
Alan Zhao	Hillcrest High	Modeling Traffic Flow Using Advanced Mathematics
Abigail Taylor	City Academy	Sky Glow And Stars
David Zhong	Skyline High	A Quantitative Comparison of Water Consumption
		and Venation between Normal and Damaged Leaves
Jessica Flynn	Salt Lake Center for Science	How does the amount of phosphates effect the
	Education (SLCSE)	growth of Dunaliella Salina?
Charlotte Jacketta	Granite Technical Institute	Methods for Optimal Elimination of Whiteflies
	Sai Parsawar Jessie Zhu Cynthia Chen & Keven Zhang Annie Yun Timmanee Loveless Alan Zhao Abigail Taylor David Zhong Jessica Flynn	Sai Parsawar Hillcrest High Jessie Zhu Juan Diego Catholic High Cynthia Chen & Keven Zhang West High Annie Yun West High Timmanee Loveless West High Alan Zhao Hillcrest High Abigail Taylor City Academy David Zhong Skyline High Jessica Flynn Salt Lake Center for Science Education (SLCSE)

Intel ISEF Grand Champion Winners	Student	School	Project Title
Observer	Isaac Bromley-Dulfano	AMES High School	Puzzle Panels
Observer	Tara Horscroft	Entheos Academy	Evaluating Salt Lake County Watershed, [Phase 1: Utilizing a low cost method to detect polluted surface water outfalls and misconnected drainage on the Jordan River]
Observer	Gussie Scott	Salt Lake Center for Science Education (SLCSE)	Using Stable Nitrogen Isotope Spectrometry to Analyze Elms and Phragmites as Potential Environmental Indicators for Nitrogen Pollution in the Jordan River
Winner	Annie Yun	West High	Using Machine Learning to Identify Asteroid Collisional Families
Winner	Tyrell Floyd & Anna Mancera	Salt Lake Center for Science Education (SLCSE)	The Effect of Environmental Factors on the Upregulation of Dicer-2 RNA and Development of Viral Entities within Dicer-1 Inhibited Tetrahymena Cells
Winner	Alexander Cheng	Hillcrest High	Analysis of Retinal Fundus Images to Detect Macular Degeneration Using Machine Learning Methods
Winner	Julia Sherman	West High	The Correlation Between Presence of Radon Gas in Residences and Diagnosis of Type 1 Diabetes
Winner	Alex Sun & Emma Sun	Hillcrest High (Alex) The Waterford School (Emma)	UNDERSTANDING "COMPASSION FADE"
Winner	Tanisha Martheswaran	The Waterford School	Waste Embraced 2.0: A Novel Study of the Effects of Optimized Struvite Precipitation on Biogas Production and Resource Recovery from Municipal Landfill Leachate and Wastewater Centrate