

SLVSEF 2015 - Senior Division			
Category and Rank	Name	School	Project Title
Animal Sciences - First	Daniela Gonzalez	Salt Lake Center for Science Education (SLCSE)	Stressed Pikas: An analysis of hormones in fecal samples from several locations
Animal Sciences - Second	Zane Schemmer	Treasure Mountain International	Effect of Salinity Levels on the Hatching Viability of Brine Shrimp
Animal Sciences - Third	Laura Burgener	Entheos Expeditionary Learning	Nest to Home: Studying the Migration Patterns of Gambel's White-Crowned Sparrows from Breeding Sites
Behavioral & Social Sciences - First	Alexander Sun	Hillcrest High	Social Norms as Motivation in High School Students
Behavioral & Social Sciences - Second	Hahah Morin & Madalyn Durrant	Granite Technical Institute	Congressional Representatives' Changes in Voting in Regard to Agricultural Legislation
Behavioral & Social Sciences - Third	Maria Mancera	Salt Lake Center for Science Education (SLCSE)	Natural Stress Reduction?: The Effect of Nature Settings on Cortisol Levels in Teachers.
Biochemistry - First	Gabe Freeman	Juan Diego Catholic High	Truncating and Capping a Coiled-Coil Peptide for Treatment of CML
Biochemistry - Second	Sai Preethika Parsawar	Hillcrest High	MS of MS: An Investigation of the Proteome of Multiple Sclerosis Patients using Mass Spectrometry in the Search for Protein Biomarkers
Biochemistry - Third	Amado Toledo	Juan Diego Catholic High	Optimal Conditions for Prenyltransferase Activity
Cellular & Molecular Biology - First	Nityam Rathi	Hillcrest High	Genetics in Medicine: Partial Mitochondrial DNA Sequencing of <i>Conus geographus</i>
Cellular & Molecular Biology - Second	Amanda Jiang	West High	The Effect of Calcium Signaling in Megakaryopoiesis
Cellular & Molecular Biology - Third	Cynthia Chen	West High	The Effect of a Mutant RAB28 on the Transport of Rhodopsin from the Golgi to the Cell Membrane
Chemistry - First	Rex Alley	Juan Diego Catholic High	A Computational Study of Ligand Influence in N-Heterocyclic Carbene Chemistry
Chemistry - Second	Timothy Quah	West High	Promoter Elements'™ Effect on Algae Based Electrocatalytic Composites for Hydrogen Evolution Reactions
Chemistry - Third	Gnimdo Tako	AMES High School	PCR Amplification from Whole Blood and Blood Treated With EDTA
Computer Science - First	Phillip Kuznetsov, Patrick Chen & Will Guss	West High	The Derivation and Application of the Functional Neural Network
Computer Science - Second	Alexander George-Kennedy	Juan Diego Catholic High	Binary Classification of fMRI Data to Diagnose Patients with Autism Spectra Disorder
Computer Science - Third	Christopher Chen & Igor Durovic	West High	Cellular Automata Based Epidemic Simulation
Earth & Planetary Science - First	Ema Parker	West High	TINIA: A Buoyancy-Driven Atmospheric Glider
Engineering: Electrical & Mechanical - First	Brandon Cui	Hillcrest High	Characterization of a Metamaterial Terahertz Waveguide
Engineering: Electrical & Mechanical - Second	Titus Quah & Annie Yun	West High	The Usage of Self-similar Geometries for Biotelemetry in Medically Implantable Devices
Engineering: Electrical & Mechanical - Third	Jaren Hudson	Tooele High	From Here to There...Wirelessly!
Engineering: Materials & Civil Engineering - First	Mitchell Simmons	West High	Design of Natural Fiber Composites Using a Hydrophilic Polymer Matrix to Enhance Mechanical Strength
Engineering: Materials & Civil Engineering - Second	Timmanee Loveless	West High	The Effect of Restriction Length on the Efficiency of Mixing
Engineering: Materials & Civil Engineering - Third	Bailey Griffith	Stansbury High School	Fence Against the Wind
Energy & Transportation - First	Kathy Liu	West High	Powering the Future: Development of Novel All-Solid-State Lithium-Sulfur Bio-Batteries for Sustainable and Scalable Energy Storage
Energy & Transportation - Second	Kaatje Fisk	Salt Lake Center for Science Education (SLCSE)	Is The Electric Car Really The Answer To Utahs Air Quality Problems?

Energy & Transportation - Third	Tanisha Martheswaran	The Waterford School	Vehicle-Generated Aeolic Energy: Finding the Optimum Blade Density to Produce Electricity Using Savonius Vertical Axis Wind Turbines
Environmental Management - First	Merry Joseph	Hillcrest High	The effects of the addition of flocculating agents in the removal of Arsenate (V) and microbiological organisms present in brackish water after terracotta water filtration.
Environmental Management - Second	Michael Tao	West High	Treatment of Aqueous Organic Pollutants Utilizing TiO ₂ Nanoparticles
Environmental Management - Third	Alicia Lu & Deborah Wooton	West High	Salt Lake Inversion: A Graphical Projection of the Correlations Between Societal Trends and Air Pollutant Concentration using Regression Analysis
Environmental Sciences - First	Anthony Cheng	Hillcrest High	Modeling and Analyzing Melting Arctic Sea Ice with Percolation Theory
Environmental Sciences - Second	Aubriana Slaughter, Katie Lewis & Benny Anjewierden	Salt Lake Center for Science Education (SLCSE)	Can We Trust the Dust: The Effects of Copper Mine Dust on Zebrafish Embryos
Environmental Sciences - Third	Peter Vawdrey & Brighton Miller	Hillcrest High	Using Common Alcohols to Decrease Primary Particulate Output of an EPA Approved Wood-burning Stove
Mathematical Sciences - First	Melissa Ivie	Entheos Expeditionary Learning	Applying a Logarithmic Progression to a Fourier Transform in Order to Obtain a Logarithmic Spectrum Analysis
Mathematical Sciences - Second	Hannah Bennett	Stansbury High School	Solar Weather and Climate Change: An Investigation of Interrelationships of Coronal Mass Ejections, the Sunspot Cycle and Terrestrial Weather
Mathematical Sciences - Third	Harrison Baker	Salt Lake Center for Science Education (SLCSE)	Weather and Economy
Medicine & Health Sciences - First	Chelsea Li	West High	Investigating Metastatic Characteristics of Candidate Dissemination Genes on a Medulloblastoma Cell Line
Medicine & Health Sciences - Second	Vismaya Kharkar	West High	Comparison of the Binding Ability of Three Drugs Across Various Cell Lines
Medicine & Health Sciences - Third	Ryan Barney	Skyline High	Efficacy of CDC Ebola PPE Guidelines and Training
Microbiology - First	Monica Martinez	Granite Technical Institute	Using HPLC to Isolate the Antibacterial Protein of Bee Defensin-1
Microbiology - Second	David Fenton	Juan Diego Catholic High	Bioactivity Guided Isolation of Antimicrobial Compounds from Tunicate Associated Bacteria
Microbiology - Third	Tyrell Floyd & Anna Mancera	Salt Lake Center for Science Education (SLCSE)	The Key to Viral Immunity: The Effect of Waterborne Viruses on Tetrahymena Strains
Physics & Astronomy - First	Suzi Creveling	Churchill Jr. High	Parabolic Catapult Launch
Physics & Astronomy - Second	Shawna McCracken	AMES High School	The Distribution of Elements in the Supernova Remnant NGC 1952 (the Crab Nebula) Using Spectroscopic Observations
Plant Sciences - First	Anna (DaEun) Sung	West High	A Novel Approach to Sustained Hydrogen Production and Algae Metabolism through Sulfur Deprivation in Light Cycles on Chlamydomonas Reinhardtii
Plant Sciences - Second	Claire Russon & Mina Projansky Ono	Salt Lake Center for Science Education (SLCSE)	Brassicas use external supplementary glucose to compensate for low photon intensity

Intel ISEF Grand Champion Winners			
Alternate	Alexander Sun	Hillcrest High	Social Norms as Motivation in High School Students
Winner	Alexander George-Kennedy	Juan Diego Catholic High	Binary Classification of fMRI Data to Diagnose Patients with Autism Spectra Disorder
Winner	Phillip Kuznetsov, Patrick Chen & Will Guss	West High	The Derivation and Application of the Functional Neural Network
Winner	Brandon Cui	Hillcrest High	Characterization of a Metamaterial Terahertz Waveguide
Winner	Chelsea Li	West High	Investigating Metastatic Characteristics of Candidate Dissemination Genes on a Medulloblastoma Cell Line
Winner	Anthony Cheng	Hillcrest High	Modeling and Analyzing Melting Arctic Sea Ice with Percolation Theory
Winner	Kathy Liu	West High	Powering the Future: Development of Novel All-Solid-State Lithium-Sulfur Bio-Batteries for Sustainable and Scalable Energy Storage