

JSHS Entrants

The major disciplines included at the National Junior Science and Humanities Symposium and a sampling of the students' actual project titles.

Environmental Science

A Novel Model to Predict the Effects of El Niño Modoki on Water Supply along the Pacific Basin
Bangor High School, Bangor, ME
Modeling and Analyzing Melting Arctic Sea Ice with Percolation Theory
Hillcrest High School, Midvale, UT

Life Sciences

Cell Immortality Revoked: Novel Method for Removing Gene Inhibitors from DNA to Induce Apoptosis to Kill Cancer Cells
La Cueva, Albuquerque, NM
Identification of Multi-Functional Anti-Cancer Compounds Using Computational Analysis
Germantown Friends School, Philadelphia, PA

Medicine and Health/Behavioral Sciences

Physical Attributes and Gait Analysis of Cross Country Runners
Cedar Falls High School, Cedar Falls, IA
3D Tumor Model for Testing Anticancer Drugs
Cabell Midland High School, Ona, WV

Engineering and Technology

Harvesting Human Body Heat to Power Wearable Biomedical Electronics
Seoul American High School, DoD Dependent Schools
Developing a Self-sufficient Solar Heating System
Navajo Preparatory School, Farmington, NM

Mathematics/Computer Science

Juggling Braids: A Novel Algorithmic Model Linking the Braid Group to Siteswaps
Massachusetts Academy of Math and Science, Worcester, MA
Model Order Reduction of Cell Signalling Pathways – An Investigation of the Invasive Mechanism of Ebola Virus
Mira Loma High School, Sacramento, CA

Physical Sciences

Object Recognition for the Visually Impaired
Signature School, Evansville, IN
Causation of Quasar Radio Emission Variation
Lincoln High School, Wisconsin Rapids, WI

Chemistry

Development of a Therapeutic Drug for Alzheimer's Disease: A Chemical Approach to Cease Amyloidosis
Townsend Harris High School, Flushing, NY
Next Generation Supercapacitor for Ultra-Fast Energy Storage and Harvesting
Richland High School, Richland, WA
The Effect of Gold and Silver Nanoparticles in Generating Voltage in a Dye-sensitized Solar Cell
Southwestern Educational Society, Mayaguez, Puerto Rico

Note to editors: In the interests of privacy, the US AEOP is not publishing full names of participants in the JSHS. We will facilitate interviews and provide Project Abstracts as requested.



ENVISION THE FUTURE

