

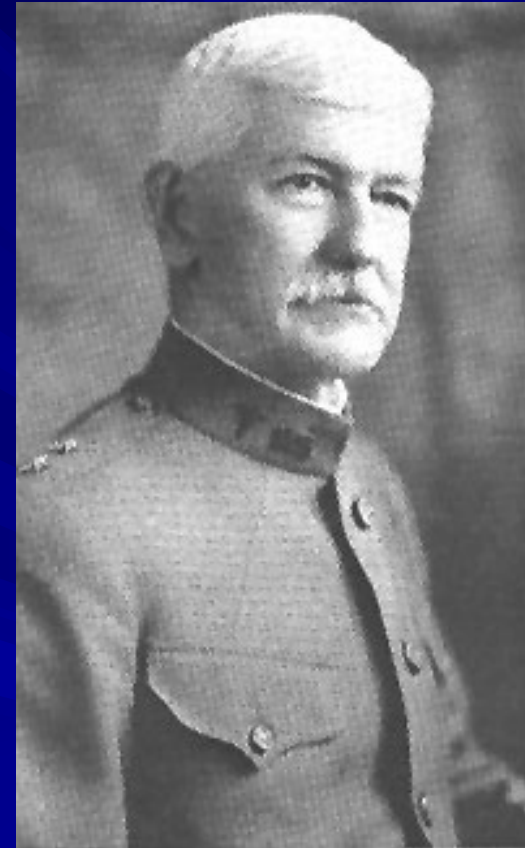


2025  
William Crawford Gorgas  
Scholarship Competition  
Finalists

# William Crawford Gorgas

Seventy-eight years ago, in 1947,  
a committee of the AAS and  
Alabama Chamber of Commerce  
met to set up the rules for the  
Gorgas Competition.

*His application of sanitary measures  
eliminated yellow fever as a blight  
on the health of the people of the world  
and made possible the construction  
of the Panama Canal*



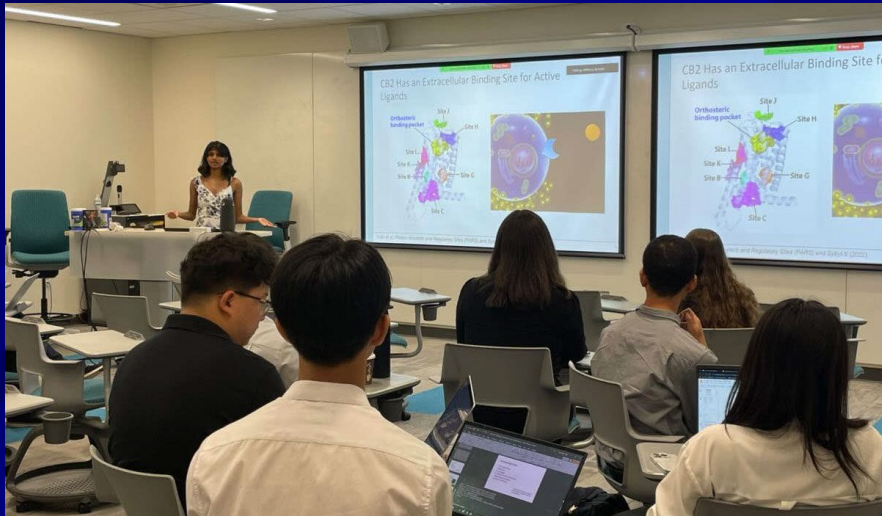
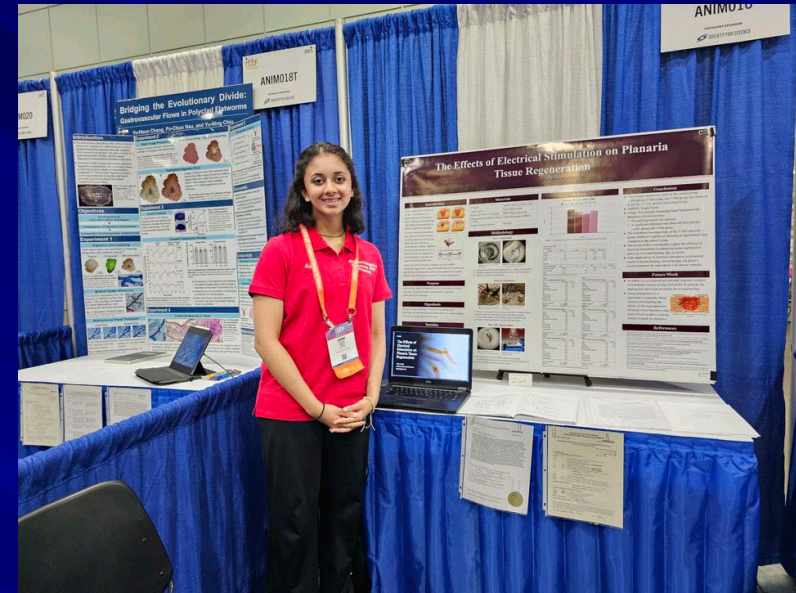
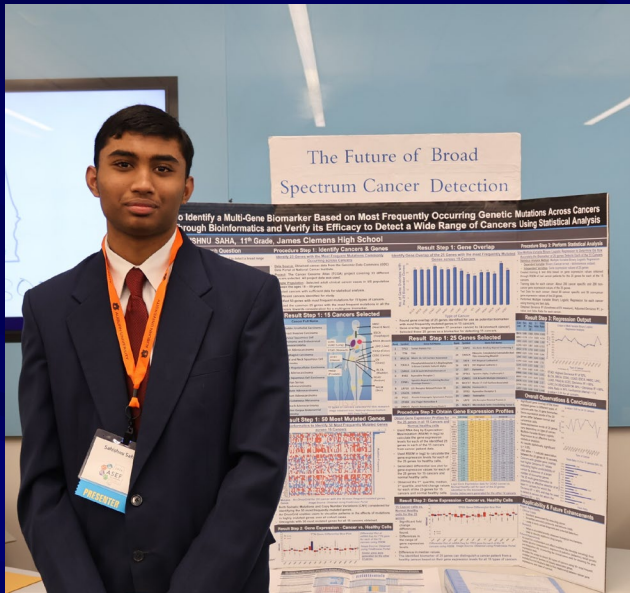
1854-1920  
Surgeon General, U.S. Army

Alabama Hall of Fame

The original charter describes these young scientists  
we honor here tonight as follows:

*You are among those  
who possess more than ordinary scientific skill,  
who indicate uncommon creative talent, and  
who upon reaching maturity it is hoped will have,  
like General Gorgas, capacity for leadership,  
patience to overcome ignorance,  
courage to resist ridicule,  
conviction based on truth,  
persistence to overcome obstacles to progress,  
and stick-to-it-ive-ness to carry on a great work  
whenever a noble cause is to be served.*







Squirm and Burn: Testing  
pre-Workout on Worms

**James Abrams**

**Wetumpka High School, Wetumpka**



## **The Effects of Electrical Stimulation on Planaria Tissue Regeneration**

**Ashu Anand**

**Alabama School of Fine Arts, Birmingham**





Computational Prediction of  
Nonabine as a Novel CB2  
Agonist

**Rhea Arya**

**Loveless Academic Magnet Program (LAMP) High School, Montgomery**



Machine-Learning-Driven  
Discovery of Novel Acoustic  
Metamaterials for Broadband  
Noise Mitigation

**Will Bao**

**Auburn High School, Auburn**





**Localization of  
Frontotemporal Dementia  
Risk Gene RAB38 to  
Glutamatergic Neurons:  
Implications for Selective  
Neuronal Vulnerability**

**Aanchal Behara**

**Alabama School of Fine Arts, Birmingham**



## **An Introspection on the Meat Industry and Finding Alternatives**

**John Belew**

**Wetumpka High School, Wetumpka**



**A Comparative Analysis of the  
Inhibitory Effects of Eucalyptus  
and Tea Tree Essential Oils on  
*Bacillus cereus* Growth  
Compared to vancomycin**

**Jessica French**

**Murphy High School, Mobile**



**Effects of Increasing Humidity  
and Temperature of Growth  
and CO<sub>2</sub> Production in  
*Echinacea purpurea***

**Esha Patel**

**Alabama School of Math and Science, Mobile**





**Laser Excited Atomic  
Fluorescence Spectroscopy for  
Detection of Heavy Metals Cd,  
As, Mn Using Mid-IR Rare-Earth  
Solid State Lasers and Raman  
Crystals**

**Srihansi Sagi**

**Alabama School of Fine Arts, Birmingham**



**To Identify a Multi-Gene  
Biomarker Based on Most  
Frequently Occurring Genetic  
Mutations Across Cancers  
Through Bioinformatics and  
Verify its Efficacy to Detect a  
Broad Range of Cancers Using  
Statistical Analysis**

**Sahishnu Saha**

**James Clemons High School, Madison**



## **Impact of Environmental Cadmium Exposure of Efferocytosis in Alveolar Macrophages**

**Prisha Sharma**

**Alabama School of Fine Arts, Birmingham**

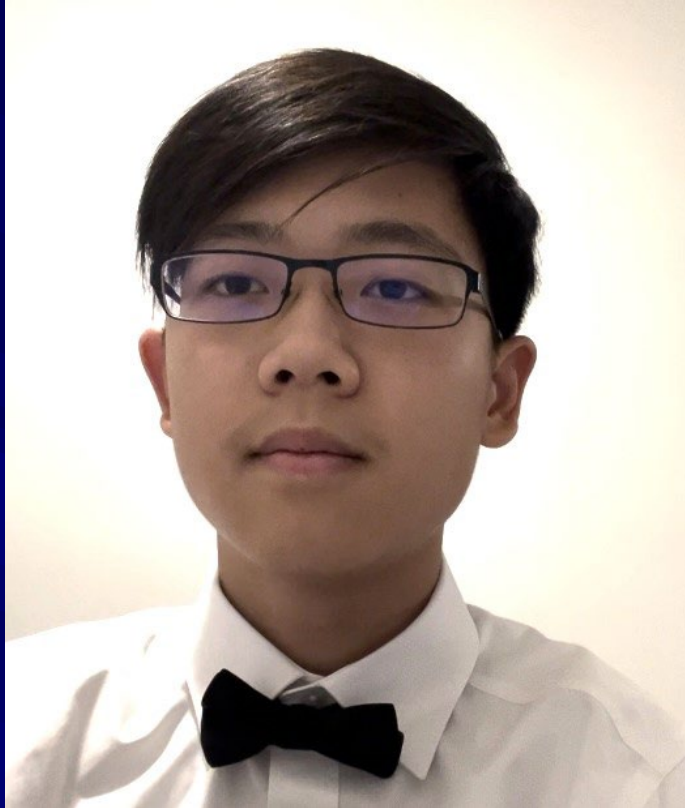


**Upcycling Plastic, What to do  
about one of the worlds  
greatest pollutants**

**Lillian Vilardi**

**Wetumpka High School, Wetumpka**





Intelligent IoT-Driven  
Medication Dispenser with  
Predictive Machine Learning  
Algorithm for Enhanced Senior  
Care

Edwin Wu

**Montgomery Academy, Montgomery**

*David Boone, Loveless Academic Magnet Program High School*  
*Hungsin Chin, Alabama School of Fine Arts*  
*Jacque Middleton, Auburn High School*  
*Natalie Ortell, Alabama School of Math and Science*  
*Julie Prerost, Murphy High School*  
*Jay Rye, Montgomery Academy*  
*Virginia Vilardi, Wetumpka High School*  
*Kathryn Weir, James Clemens High School*  
*Dreama White, Alabama School of Fine Arts*

*Thanks  
to the 2025  
Teacher-Sponsors*