



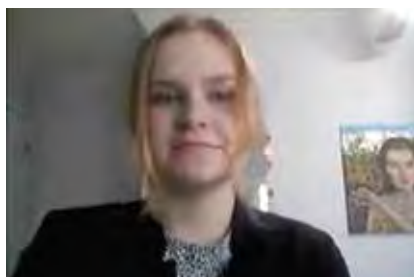
Educate.
Innovate.
Achieve.

ABOUT

Science Coach, a program of BioSTL, engages 6th-12th grade public, private, homeschooled students in the process of scientific inquiry so they can tackle the problems of today and tomorrow. The Science Coach program teaches students to choose questions of personal interest, create procedures to test hypotheses, arrive at answers with validity, and build confidence in solving real world problems. Schools pay their teachers to coach sports teams. Science Coach pays teams of teachers to coach students to create accomplished science fair projects.

Watch, learn, and prepare to be impressed! with these students from the St. Louis region display and talk about their year-long research projects through Science Coach.

STUDENTS



HANNAH DAVIS

12th Grade
Hayti High School

Dual expressing cells have been found to be the fundamental factor that causes Type 1 Diabetes



MALLORIE COFFEE

11th Grade
Jackson High School

Solving the antibiotic resistance of Strep by preventing the initial release of toxins



MACY STEBER

11th Grade
Holt High School

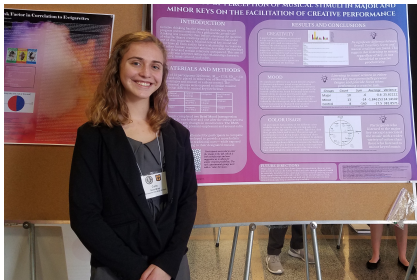
Vitamin D supplementation could reduce the need for insulin in type I diabetics



AMAYA KOPP

12th Grade
Holt High School

The expression of the TRVP4 gene in humans could potentially affect the development and progress of multiple sclerosis.



CORA SVERDRUP

12th Grade
Holt High School

Music in different keys could potentially affect creative expression.



SAMUEL BERKLEY

12th Grade
Governor French Academy

I wrote code that creates constantly-changing passwords that cannot be broken by hackers



LaNITA DEVINE

11th Grade
Holt High School

Development of a reporter plasmid for RSV is a necessary first step in creation of an RSV vaccine



BRENTON GOYEA

9th Grade
Governor French Academy

Pomegranate peel powder was the most effective of three methods tested for cleaning up oil spills



WINSTON PAIS

11th Grade
Jackson High School

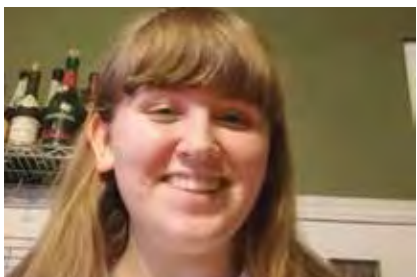
Extended iPhone usage was found to have a negative impact on one's cervical neck bone angle



TAHLOR JOHNSON

11th Grade
Governor French Academy

Shampoos with sulfates, such as Pantene and Garnier, cause hair dye to fade at an accelerated rate



SAGE REAGAN

9th Grade
Governor French Academy

Thrash counts show effect of heavy metals on *C. Elegans* and may predict neurodegenerative disease



ELANOR MURPHY

8th grade
Timber Ridge Academy

The Effects of Low Frequency Noise from Wind Turbines on *Drosophila Melanogaster*



SOPHIE LITTLE

9th Grade
Timber Ridge Academy

Drought Tolerance in *Setaria viridis* and its Application to Worldwide Crops



MADISYN SWAN

11th Grade
Hayti High School

Bacteria Growth on Toothbrushes



JAH'NIIHYA BARRINGER AND CLOEY PHELPS

12th Grade
Hayti High School

Phytoremediation of Heavy Metals in Water Using Duckweed



MEEGAN SANDERS

11th Grade
Hayti High School

How Cognitive Learning is Affected by Carbon Dioxide Levels



STEMAIYA ROBINSON

11th grade
Hayti High School

How Does Air Pollution Affect Our Crops



BRANDI PEOPLES

11th Grade
Hayti High School

How Does Air Pollution Affect Our Crops



HAYLEY MATTERN

12th Grade
Holt High School

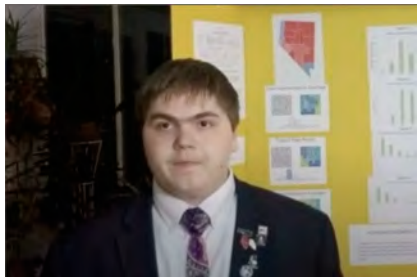
Evaluating mutations in Volvox algae could help us understand the development of multi-cellularity



EMMA SHIELDS

10th Grade
Jackson High School

Putting Clams to the Test



JOHN STEWART

12th Grade
Governor French Academy

Seat distribution and calculated efficiency gap indicates effective fairness metric for district map



ISABELLA NAVARRE

9th grade
Governor French Academy

Computer Vision and Machine Learning were able to correctly identify different flower species from photographs



CATIE VINCENT

10th Grade
Governor French Academy

The general public is most likely to be accepting of deviance in a social setting



GRACYN PIETRUSINSKI

12th Grade
Holt High School

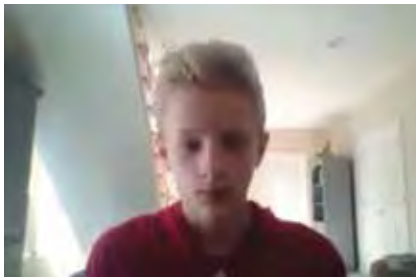
The inclusion of a different type of antigen could make a more effective flu vaccine



SOPHIA LANGE

9th Grade
Timber Ridge Academy

Blinded by Science



DANIEL WAMSLEY

8th Grade
Timber Ridge Academy

Creating a Mutant Volvox Library to Improve Biofuel Research



KATHERINE PHILLIPS

12th grade
Jackson High School

The Effect of Platinum (II) Chloride on Cancerous Lung Cells



MEGAN STEBER

11th Grade
Holt High School

Vitamin D supplementation could reduce circulating blood sugar in type I diabetics



DEVANSHI PATEL

12th Grade
Holt High School

Industrial manufacturing of chemicals could be made more efficient, less expensive, and more environmentally friendly by using different catalysts.



ELI JONES

11th grade
Jackson High School

Current developments towards the total synthesis of the new potential drug candidate Lindbergin E could allow for the cost-effective, large-scale preparation of the drug and its analogs.