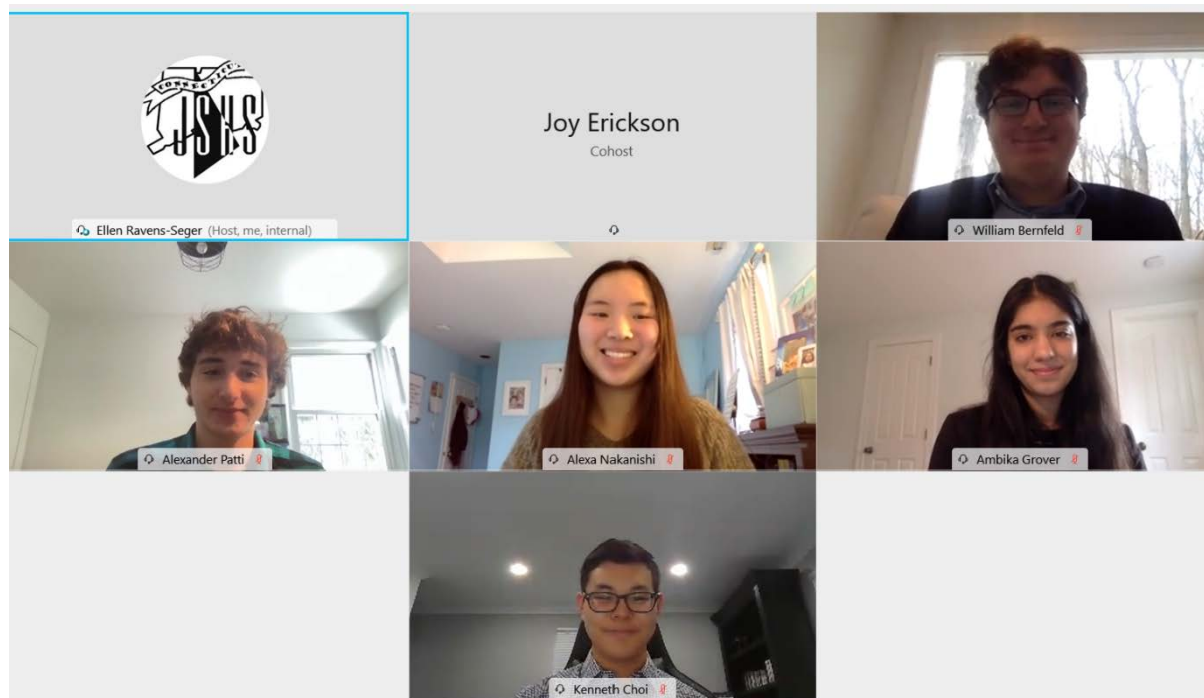


2021 Connecticut Junior Science and Humanities Symposium Results



Students William Bernfeld, Alexander Patti, Alexa Nakanishi, Ambika Grover, and Kenneth Choi are Connecticut's representatives at the April 2021 National Junior Science and Humanities Symposium. (Image from Connecticut Junior Science and Humanities Symposium, held virtually March 6, 2021)

Oral Presenters

1st Place: Ambika Grover, sophomore, Greenwich High School

Rapid, Noninvasive, Fluorescence-based Detection for Elevated Levels of Nitric Oxide in Exhaled Breath, as a Marker for Hazardous PM_{2.5} Exposure

2nd Place: Alexa Nakanishi, junior, Greenwich High School

Multi-component Fixation Tracking in Gaze Interaction for Rapid, Non-invasive Diagnosis of Specific Learning Disorders

3rd Place: Kenneth Choi, senior, Ridgefield High School

Constructing General Hamiltonian Ground States on a Quantum Computer Using the Projected Cooling Sensor Algorithm

4th Place: William Bernfeld, junior, King School

Non-canonical Base Pairing in Self-assembling DNA Crystals

5th Place: Sofia Pronina, senior, Greenwich High School

Rapid, Low-cost, Visual Lyme Disease Diagnosis via Lab-on-Chip, Chemiluminescent Detection of Borrelia-induced Antibodies

6th Place: Eesha Acharya, senior, Amity Regional High School

Determining the Effects of Gender and Age on the Severity of Nonalcoholic Steatohepatitis

Special Merit: Ethan Lavi, Amity Regional High School; Hannah E. MacDonald, Greens Farms Academy

Certificates of Appreciation: Anchal Bahel, Amity Regional High School; Abigail Bouton, Darien High School; Aditya Kabra, East Lyme High School; Kavin Kathir, Cheshire Academy; Nadine Noaman, Glastonbury High School; Mark Wang, Avon High School

Poster Presenters

1st Place: Alexander Patti, senior, Greenwich High School

Plant Growth Enhancement & Fungal Disease Suppression via Copper, Zinc, and Manganese Nanoparticle Foliar Sprays

2nd Place: Abby Barnett, junior, Sacred Heart Greenwich

Designing and Testing an Activated Carbon Cloth Filter to Reduce the Prevalence of Phosphates and Nitrates in the Long Island Sound

3rd Place: Ryan Kim, sophomore, Choate Rosemary Hall

Development of an Autonomously Navigating Robot Capable of Conversing and Scanning Body Temperature to Help Screen for COVID-19

Presidential Scholar Nominees

Aditya Kabra, senior, East Lyme High School

Examining the Relationship between Labor Cost and Firm Strategy through Mixed Methods Content Analysis on Panel Data and SEC Filings

Isabel Petron, senior, Joel Barlow High School

Unexpected UVR Mutation Burden in Melanomas – A Continuation of Research in a United States Cohort Focusing on UV Impact on Cutaneous Melanomas

UConn Academic Excellence Scholarship

Alexa Nakanishi, junior, Greenwich High School

Backyard Scientist Awards

Sienna Matregrano, senior, Bridgeport Regional Aquaculture Science & Technology Education Center
Determining the Efficacy of Zingiber officinale to Promote the Degradation of Bioplastics through Amylase Hydrolysis

Alexis S. Ogrinz, junior, Joel Barlow High School

The Use of Pleurotus ostreatus as Mycoremediation for Poly-lactic Acid Plastic in Landfills

People's Choice Awards

Yuanqin Dai, junior, Kent School

How to Use Artificial Intelligence to Automatically and Accurately Recognize Wildlife Animal Species from Camera Traps Deployed in the Wild

Reed Cooper, junior, Joel Barlow High School

The Effect of Various Ammonium Nitrate Concentrations on Rates of Transpiration in Phaseolus lunatus

Teacher Award

Kirk Shadle, Bridgeport Regional Aquaculture Science & Technology Education Center