



**For Immediate Release**  
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**Contact:**  
Susan Henley 843-746-1300

## Media Release

### Academic Magnet's Jenny Yao Receives Prestigious Honor

Academic Magnet High  
School

**Gerrita Postlewait, Ed.D.**  
Superintendent of Schools

**Cynthia Ambrose**  
Deputy Superintendent of Learning  
Services

**Kim Wilson**  
Executive Director of Secondary  
Learning Community

**Catherine Spencer**  
Principal

**North Charleston, SC** – Academic Magnet High School (AMHS) is consistently ranked as one of the nation's top high schools because of students like senior Jenny Yao. The senior has earned several prestigious awards and honors during her time at AMHS, and recently, picked up another significant recognition. Yao was named a semifinalist in this year's Siemens Competition, the nation's premier competition in math, science, and technology for high school students. She was selected from nearly 1900 students who submitted individual and team research projects.

"These semifinalists should be extremely proud of this high-level academic accomplishment," said David Etwiler, CEO of the Siemens Foundation. "Their projects represent some of the most noteworthy and exceptional of those submitted, and reflected an advanced level of STEM (Science, Technology, Engineering, and Math) research."

Launched by the Siemens Foundation in 1999, the Siemens Competition promotes excellence in math, science, and technology, and is recognized by colleges and universities as the premier math and science research competition in the United States. More than \$600,000 in college scholarships are awarded to students annually through the Siemens Competition during regional and national events administered by Discovery Education. The Siemens Competition honors the best and brightest students for their accomplishments in math and science; students who are changing the world for the better.

Yao has been mentored since her sophomore year by Dr. Ying Mei of the Clemson-MUSC (Medical University of South Carolina) Joint Bioengineering Program. Yao has actually worked on a few projects with Dr. Mei, and co-authored a journal publication in *Acta Biomaterialia*, a leading biomaterials journal.

"My project, titled 'Engineering Metabolically Viable Stem Cell Spheroids for Human Cardiac Regeneration,' sought to investigate the effects of different external nutrient environments on 3D stem cell microtissues, or spheroids, on spheroid viability," Yao said. "[I wanted to clearly show] the internal nutrient and metabolic environment within these microtissues as well. These findings [supported] my

novel spheroid construct, which was designed to improve nutrient availability and transport, and to enhance spheroid survival as cell-delivery mechanisms for cardiac transplantation and regeneration. My hope is this project will help in the pursuit of creating effective, long-term treatments for heart attacks and other cardiovascular diseases.”

Yao has been thoroughly involved in biomedical engineering research for most of her high school career. She was named a finalist and won a full-tuition scholarship at the 2017 Intel International Science and Engineering Fair in Los Angeles with her latest project.

Academically, Jenny has been named a National Merit Semifinalist and an AP Scholar. She has been the president of Mu Alpha Theta (Math Honor Society) since her junior year, and competes in the annual Trident Technical College Quest Competition and South Carolina Science Olympiad.

An active composer and pianist, Yao was named one of seven national finalists in the Music Teachers’ National Association Composition Competition and earned the opportunity to perform at Carnegie Hall in New York City. She also toured abroad in Russia, performing in community concerts with the Kostroma Symphony Orchestra. Inspired by that experience, she founded AMHS’s Fine Arts Youth Outreach Club, which creates showcases for Lowcountry students to engage them in the arts and foster future artists and enthusiasts.

“Jenny most certainly embodies the very best of Academic Magnet High School,” explained Principal Catherine Spencer. “Her outstanding achievement and involvement in the arts, academics, leadership, and service prompt me to consider her the perfect profile student representing the best qualities that have elevated our school to one of the best in the nation. Congratulations from our entire Raptor community go out to Jenny for her much-deserved recognition, and we are grateful for her shining star.”

Yao plans on double majoring in biomedical engineering and musical composition to further explore both my research and artistic interests. She is still deciding on her destination for college.

For more information about the Siemens Competition, go to <https://siemenscompetition.discoveryeducation.com/> or contact Elizabeth Cho at [Elizabeth.cho@siemens.com](mailto:Elizabeth.cho@siemens.com). To learn more about Jenny Yao, please contact AMHS’s Media Specialist, Susan Henley, at (843) 746-1300.

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#### **About the Charleston County School District**

Charleston County School District (CCSD) is the second largest school system in South Carolina representing a unique blend of urban, suburban, and rural schools that span 1,000 square miles along the coast. CCSD serves more than 50,000 students in 86 schools and specialized programs. With approximately 6,100 employees district-wide, CCSD is the fourth largest employer in the region.

CCSD offers a diverse, expanding portfolio of options and specialized programs, delivered through neighborhood, charter, magnet, IB (international baccalaureate), and Montessori schools, and is divided into three Learning Communities. Options include specialized programs in science, engineering and mathematics; liberal arts; music and other creative and performing arts; career and technical preparation programs; and military and other public service enterprises.