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**GTRI Signal**  
MONTHLY RESEARCH NEWSLETTER

**GT** Georgia Tech.  
Research Institute

## SEPTEMBER RESEARCH NEWS

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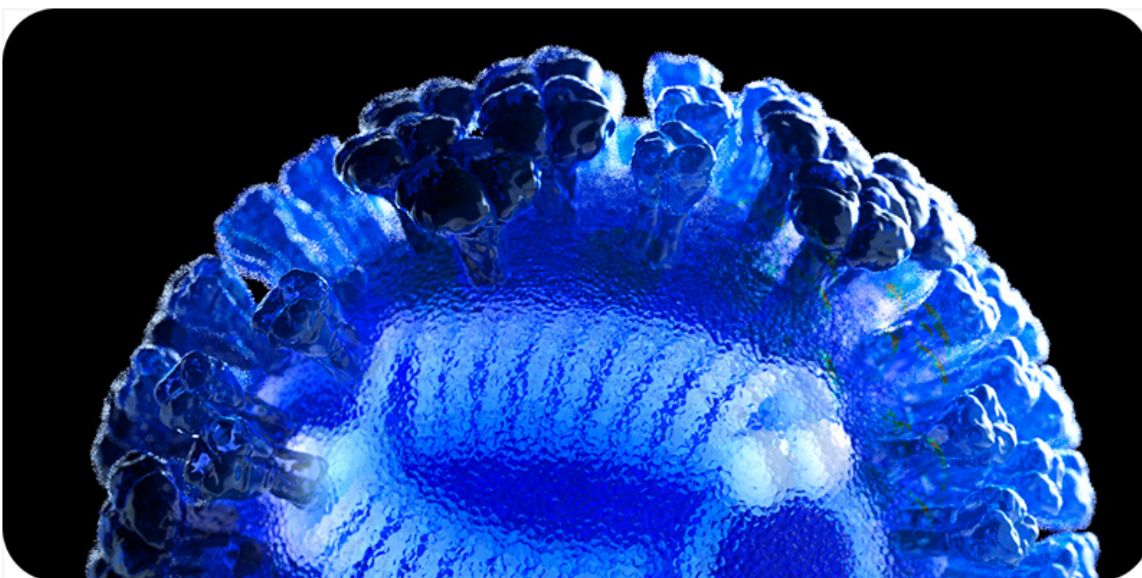
### [\*\*ARTS-V1: Advanced Radar Threat System Helps Aircrews Train to Evade Enemy Missiles\*\*](#)

U.S. pilots and aircrews will be safer flying into contested airspace thanks to training provided by a 142-ton threat simulator system that shows them how radars built to guide hostile surface-to-air missiles (SAMs) interact with warning systems on their aircraft. The Advanced Radar Threat System Variant 1 (ARTS-V1) will be used on training ranges to simulate how defensive systems on fifth-generation aircraft engage with a variety of modern target engagement radar systems used by other nations.



### **GTRI's DART Program Supports DoD Research Opportunities for HBCUs**

Historically black colleges and universities, or HBCUs, contribute an estimated \$15 billion to the U.S. economy each year and produce one-fourth of all Black graduates with critical degrees in science, technology, engineering, and math (STEM). But funding inequities prevent many HBCUs from providing the necessary infrastructure to perform impactful research, including in the defense space. GTRI is addressing that challenge through its Defense-University Affiliated Research Traineeship (DART) Program. DART's main goal is to leverage the pipeline of researchers underrepresented in STEM and accelerate their awareness, knowledge, access, and opportunities in research and development (R&D) contracting for the U.S. Department of Defense (DoD).



### **Common Probiotic Bacteria Could Help Boost Protection Against Influenza**

A newly funded research project might one day lead to the development of a pill or capsule able to boost the effectiveness of traditional vaccines against influenza,

which kills as many as 52,000 people and leads to hundreds of thousands of hospitalizations a year in the United States. Georgia Tech researchers have received

funding to study the concept of using modified strains of probiotic bacteria – that are already part of the human gut microbiome – to stimulate the formation of antibodies against the flu virus in the body’s mucosal membranes.

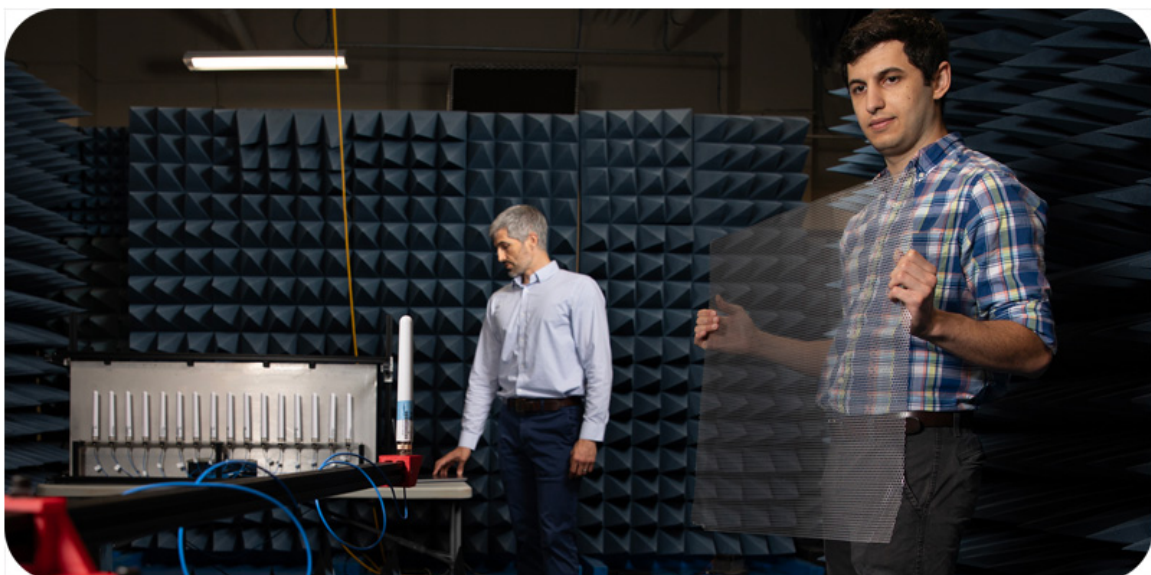


### [GTRI Names New Director for Applied Systems Laboratory \(ASL\)](#)

The Georgia Tech Research Institute (GTRI) has announced the selection of Linda Viney as the new director for the Applied Systems Laboratory (ASL). Viney assumed the role on September 15. As director, Viney will work with the ASL leadership team to direct the lab’s research mission, coordinate sponsor engagement, collaborate with other GTRI labs, and maximize the impact of its mission.

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## FEATURED



[Antennas](#)

As the number of elements on phased array antennas continues to grow, so does the volume of data that must be processed to extract information from the signals gathered. Researchers at the Georgia Institute of Technology have developed a new approach to intelligently process that data closer to where it is generated - on the antenna subarrays themselves.

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## GTRI PEOPLE



[Bridging Military Expertise with Research: GTRI's Hiring Our Heroes Fellowship](#)

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## GTRI IN THE NEWS

[VeteranOfThe Day Navy Veteran Richard H. Truly](#) (VA News)

[Incredible moment photographer captured 'gigantic jets' of lightning that are bright red and can reach the edge of SPACE](#) (Daily Mail)

[TRIAD streamlines edge processing of data in phased-array antennas](#)  
(New Electronics)

[TRIAD Streamlines Edge Processing of Data in Phased-Array Antennas](#)  
(Microwave Journal)

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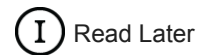
## FEATURED VIDEO



U.S. pilots and aircrews will be safer flying into contested airspace thanks to training provided by a 142-ton threat simulator system that shows them how radars built to guide hostile surface-to-air missiles (SAMs) interact with warning systems on their aircraft. The Advanced Radar Threat System Variant 1 (ARTS-V1) will be used on training ranges to simulate how defensive systems on fifth-generation aircraft engage with a variety of modern target engagement radar systems used by other nations.

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