Inter American University of Puerto Rico-Aguadilla Enhances Research Capabilities with LVEM5 Benchtop Electron Microscope Installation [1]

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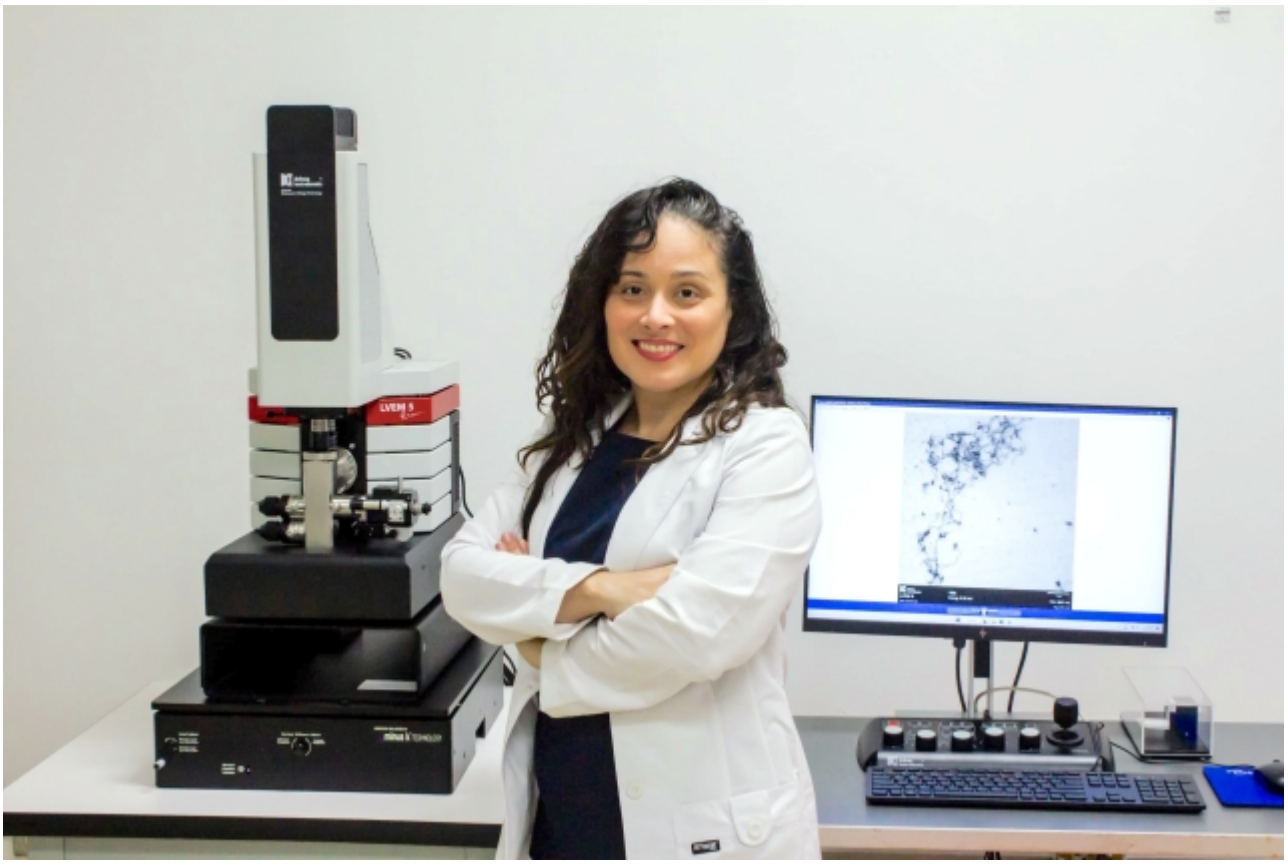

Aguadilla, Puerto Rico October 25th, 2023 – The Inter American University of Puerto Rico-Aguadilla (IAUPR-Ag) proudly announces the acquisition and successful installation of the cutting-edge Delong Instruments LVEM5 benchtop electron microscope, with TEM and SEM modes, bolstering its research capabilities and positioning the institution at the forefront of scientific exploration and discovery.

The LVEM5 benchtop electron microscope, renowned for its high-resolution imaging and versatility, will empower researchers and students at the Inter American University of Puerto Rico-Aguadilla to delve into the intricate world of nanoscale structures, paving the way for ground-breaking research across various disciplines including materials science, nanotechnology, biology, and more.

This cutting-edge instrument was secured through an NSF Biology Integration Institute project entitled Host-Virus Evolutionary Dynamics Institute (HVEDI), a multi-institutional, multi-investigator institute to study host-virus interactions across domains of life (Bacteria, Archaea, Eukarya) with the goal of determining universal "rules of life" to which all viruses adhere. Six partner institutions are part of this $6.1 million initiative: The University of Arkansas at Fayetteville, University of University of California at Merced, the University of Arkansas at Pine Bluff, University of Maine at Orono, Ouachita Baptist University, and IAUPR-Aguadilla.

Dr. Elizabeth Padilla-Crespo’s, Distinguished Research Professor at the Inter American University of Puerto Rico-Aguadilla, serves as a co-principal investigator on the primary award and as the

lead on the sub-award to IAUPR-Ag.

The LVEM5 instrument, the only of its type in Puerto Rico; is installed in Dr. Padilla-Crespo's laboratory at IAUPR-Ag, where she will work with her research students and collaborators to examine bacteriophages—viruses that infect bacteria—and how they interact with hosts.

"Having this instrument is a dream come true, as a microbiologist you see those beautiful and detailed TEM and SEM pictures in textbooks and hope you could produce those images with your fingertips one day, well now that is a reality", said Padilla-Crespo. "Also, the use of advanced electron microscopy as a visualization tool will be of great impact to our students and a strong component of our STEM education and research efforts. Students will have the opportunity to operate one of the most sophisticated microscopes in the world, the "invisible world" will become more tangible for them and hopefully inspire them to follow research careers and/or enter the STEM workforce.

The LVEM5 microscope is unique in that it offers multiple modes of electron microscopy and exceptional imaging capabilities with a resolution down to nanometer scales, allowing for precise analysis of samples. Its compact design and ease of use make it a valuable tool for both experienced researchers and those new to electron microscopy.

"We are thrilled to introduce the LVEM5 benchtop electron microscope to our academic community," said Elie A. Agésilas PhD, Chancellor at Interamerican University. "This state-of-the-art equipment represents a significant leap in our research capabilities, enabling our researchers and students to explore the micro and nanoscale world with unprecedented precision and detail."

"This investment underscores our commitment to providing our researchers and students with access to world-class technologies and resources, fostering innovation and academic excellence," added Rafael Ramírez Rivera, PhD President of the InterAmerican University of Puerto Rico. "We are confident that the LVEM5 benchtop electron microscope will significantly contribute to our research endeavors and ultimately drive advancements in science and technology."

Inter American University of Puerto Rico-Aguadilla eagerly looks forward to the research breakthroughs and discoveries that will arise from the utilization of the LVEM5 benchtop electron microscope, further solidifying the university's position as a hub for cutting-edge research and academic achievement.

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