DEVCOM and JSNN Partner on Advanced Nanoscale Materials for Future Soldiers

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The US Army Combat Capabilities Development (DevCom) Soldier Center has entered a partnership with the Joint School of Nanoscience and Nanoengineering (JSNN).

The new partnership seeks to develop advanced nanoscale materials that can improve soldier protection.

Under a $1.05m cooperative agreement, a new joint collaborative laboratory has been created in North Carolina that will support research projects in the fields of nanoengineering and nanoscience.

Titled 'Innovation Collaborative Laboratory for Nanotechnologies to Empower the Future Soldier' (ICONS), the laboratory will allow DEVCOM scientists and engineers, and JSNN faculty-led research teams, students, and postdoctoral fellows to directly collaborate and conduct research.

The research projects will aim to advance technologies to support soldiers and future military requirements.

ICONS's major focus areas include developing new sustainable nanoscale materials that can be integrated into yarn or fabric for soldiers, or used as additives for helmets and safety devices.

The materials will be designed to be lighter, faster, safer, and stronger.

The research teams will also have access to JSNN's nanodevice fabrication facilities that can be leveraged to develop sensors that can detect several chemical hazards.

JSNN professors Dr Kristen Dellinger and Dr Tetyana Ignatova will co-lead the ICONS research projects.

JSNN dean Sherine Obare said: "This is a unique opportunity for JSNN students to engage in collaborative research that advances the technologies needed to support soldiers and other military-relevant applications.

"And with JSNN's proximity to several North Carolina military bases, our researchers can directly connect with military personnel and veterans to understand the needs of soldiers to develop solutions from the users' perspective."

Read the original article on Army Technology.