U.S. AIR FORCE TECHNOLOGY TRANSFER PROGRAM OFFICE

WITH



EDUCATION PARTNERSHIP AGREEMENTS

EDUCATIONAL PARTNERSHIP Agreement Provides Collaboration Opportunities by Jessica Casserly

A recently signed Education Partnership Agreement between Hanscom and the George J. Kostas Research Institute for Homeland Security (KRI) at Northeastern University grants new research and educational collaboration opportunities for the Air Force Life Cycle Management programs here.

The three-year Education Partnership Agreement (EPA) allows Hanscom and KRI to collaborate in multiple areas, including research, education and workforce development. An EPA is a technology transfer agreement between а defense laboratory educational and an institution for the purpose of encouraging and enhancing study in scientific disciplines at all levels of education.

TECHNOLOGY TRANSFER

In the fall of 2015, the Air Force Research Laboratory commander, delegated the Cooperative Research and Development Agreements and an authority for Hanscom to enter into



Peter Boynton, the George J. Kostas Research Institute for Homeland Security CEO, speaks to a group of Hanscom Community Partnership Committee members in KRI's materials and devices laboratory during a facility tour in Burlington, Massachusetts. (Courtesy photo)

COMPANY NAME: George J. Kostas Research Institute for Homeland Security (KRI) Northeastern University Burlington, MA

TECHNICAL PROJECT OFFICE: AFLCMC

Acquisition Intelligence Division, Hanscom AFB, MA

PUBLISHED: June 2016



EPAs to Dr. Tim Rudolph, AFLCMC chief technology officer. Rudolph recognized the potential for a partnership between Hanscom and KRI and began a dialogue with Hanscom and KRI representatives based on a specific research area under the AFLCMC Acquisition Intelligence division, which led to the agreement, which was signed this spring.

"We are grateful to our partners at Northeastern's Kostas Research Institute as we team up on projects in multiple disciplines," said Rudolph. "The mission of Kostas aligns well with AFLCMC missions across multiple functional areas. Together, we are already beginning to see how this mutually beneficial relationship on homeland and national security supports students and professors at Kostas, as well as Hanscom personnel."

Dennis Miller, associate director of Engineering and Technical Management at Hanscom, worked closely with Rudolph and KRI on the agreement and sees partnerships like this one as a meaningful asset for AFLCMC programs and the engineering workforce.

"Today, success in a very constrained environment requires national reach, the integration of assets and capabilities from government, industry, DoD, and the university community," Miller said. "Although we can't 'schedule' our technology breakthroughs, we can create the innovative and collaborative environment to significantly increase the frequency of new tools, ideas and processes that enhance our productive capacity."

When Rudolph and Miller reached out to Northeastern University with this opportunity, KRI CEO Peter Boynton recognized it as a chance to implement their namesake Dr. George J. Kostas's "three-legged stool" approach.

"[Dr. Kostas] saw the almost magic that can happen if you can successfully co-locate the 'three-legged stool,' the academic researchers, the industry experts and the government programs, in a way that takes leading research and translates it into usable technology," Boynton said. "We are thrilled that we've found an arm of the government, in Hanscom, which understands the importance of partnering with academia and industry. That's what is so key to us, a willing and capable government partner."

Miller agrees that the ability to work with a diverse group of experts will be a key component of this partnership's future successes.

"This initiative provides the necessary catalyst leading to sharing and integration of assets and capabilities with not only university and academic communities, but also with industry, other government agencies," Miller said. "This allows technology and business innovation to come together and create, develop, and realize costeffective solutions to problems of national importance."

PAYOFF

AFLCMC programs at Hanscom are already capitalizing on the new partnership to enhance current projects.

"The EPA with KRI offers an opportunity to improve the cybersecurity of acquisition efforts at Hanscom," said Joseph Pridotkas, AFLCMC Acquisition Intelligence division chief. "What we've asked KRI to research is how to further integrate cyber threat information into systems security engineering, which is a key aspect of the DoD risk assessment process. We expect the KRI effort will help us further understand how cyber threat information can better support risk assessment and system design decisions within acquisition program offices."

Both Hanscom and KRI are also looking for new ways to take advantage of their recently established partnership. Battle Management is exploring future collaborations with KRI in the areas of cyber security, resiliency and electronic protection, said Steve Falcone, Battle Management director of engineering.

"In addition to nefarious software components, we are looking for automated detection of nefarious and extraneous electronics that may have been imbedded into our systems intended to disrupt, deceive, destroy or eavesdrop on our communication and radar systems," Falcone said. "We hope Northeastern and the KRI can help us develop and demonstrate continuous improvements in this area."

Boynton and his team at KRI are looking forward to continued partnership development with Battle Management and other AFLCMC programs at Hanscom.

"The more you interact, the more you can put faces with a name and the easier it is to pick up a phone and think about how we can do things together," Boynton said.

Linking technology with the mission and marketplace.

U.S. AIR FORCE TECHNOLOGY TRANSFER PROGRAM OFFICE

2274 D STREET | BUILDING 16, ROOM 107 | WRIGHT-PATTERSON AIR FORCE BASE | OHIO | 45433 COMM: 937-904-9830 | AF.TECHTRANSFER@US.AF.MIL | WWW.WPAFB.AF.MIL/T2