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ACADEMIC PARTNERSHIPS CHART FAST TRACK TO TOMORROW

By Amelia Cohen-Levy, Ctr., Human Development Directorate

It is a two-way street when it comes to benefiting from strategic partnerships between the National Geospatial-Intelligence Agency and nearly 20 academic institutions designated as NGA Centers of Academic Excellence in Geospatial Sciences. In moving forward together, both parties are driving toward a future in which geospatial data are at the center of national well-being.

NGA Strategy 2015 outlines goals that drive NGA’s commitment to developing effective academic partnerships. It calls for the agency to embrace the open geospatial community and break down barriers to academic and commercial innovation that will help the agency succeed in the open. NGA Director Robert Cardillo demonstrated his commitment by personally handing each of the academic institutions the certificate that designates them a CAE.

The CAE partners benefit from exchanging academic innovation for real-world experience. The NGA Vision – Know the Earth…Show the Way…Understand the World – holds appeal for the CAE designees. The relationship between NGA and the designees establishes a foundation for a host of fruitful interactions that advance science and technology while pushing for applications that are novel, yet practical.

The partnerships also raise the stakes for academia, making their work “more than just a book drill, but an opportunity to do something for a customer that cares about the same work while being of service to their country,” said Ann Freelander of NGA’s Analysis directorate. “NGA helps the universities’ curriculums sync up with what’s happening in the field and gives them something real to look at.”

John Brockhaus, Ph.D., of West Point believes that his institution’s designation as a CAE “elevates our academic credibility and demonstrates our commitment to a rigorous high-quality geospatial academic experience for our cadets.”

The experience ensures that students will be better prepared to address real-world concerns across a broad range of relevant disciplines. Geospatial intelligence relates to information technology, environmental science and policy, global health, and public and international affairs. It is far more than simply reading a map; it is interwoven into issues of vast social complexity.

“It’s important to know how to find something – not just the coordinates and where it sits in the world – but to understand a particular place and a particular time requires a lot of background and knowledge,” said John Wilson, Ph.D., professor at the University of Southern California. “Intelligence is about acquiring, synthesizing and utilizing knowledge. Knowing how the world works should not come as a surprise.”

Beyond the potential for recruitment, a relationship with NGA offers the students at designated schools a great advantage. “The faculty will be better engaged and connected with those who are situated in that domain, so that we can better understand the opportunities and challenges,” said Wilson. “We would like our students to leave here capable of contributing right from the get-go.”

Most of all, NGA’s academic partners offer to spend their time working on the hard problems, those things that aren’t easy to explore in the busy, task-oriented environment of a government workplace. One of academia’s great strengths is that its members aren’t bound to doing things the way they’ve always been done.

By partnering with the academic community, NGA gets to focus on the work in front of them, while also serving as what Anthony Stefanidis, Ph.D., of Virginia’s George Mason University called “an articulator of the needs of the IC [intelligence community].”

In turn, Stefanidis said, academia uses its ingenuity and resources – including millions of dollars in grant and research funding – to pursue innovative efforts that meet the IC’s projected needs.

Wilson anticipates that the partnership between NGA and academia will facilitate solutions to today’s crises, such as those relating to environmental science and ever-increasing populations – issues that are great challenges to the global community. Academia uses geospatial sciences to understand climate change, disease spread, and situations related to crop rotations and human migrations. For its part, NGA has made valuable contributions to fighting the West African Ebola outbreak of 2014 and to rescue efforts in New Orleans after Hurricane Katrina and in Nepal after the devastating earthquake of 2015.

“There is a different tradecraft that is emerging,” said Stefanidis. “This is a way that we can collaborate so that we can grow our academic programs and help grow NGA as well. It’s particularly appropriate to NGA because the “G” is what’s evolving right now. We will help each other move to the future.”

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