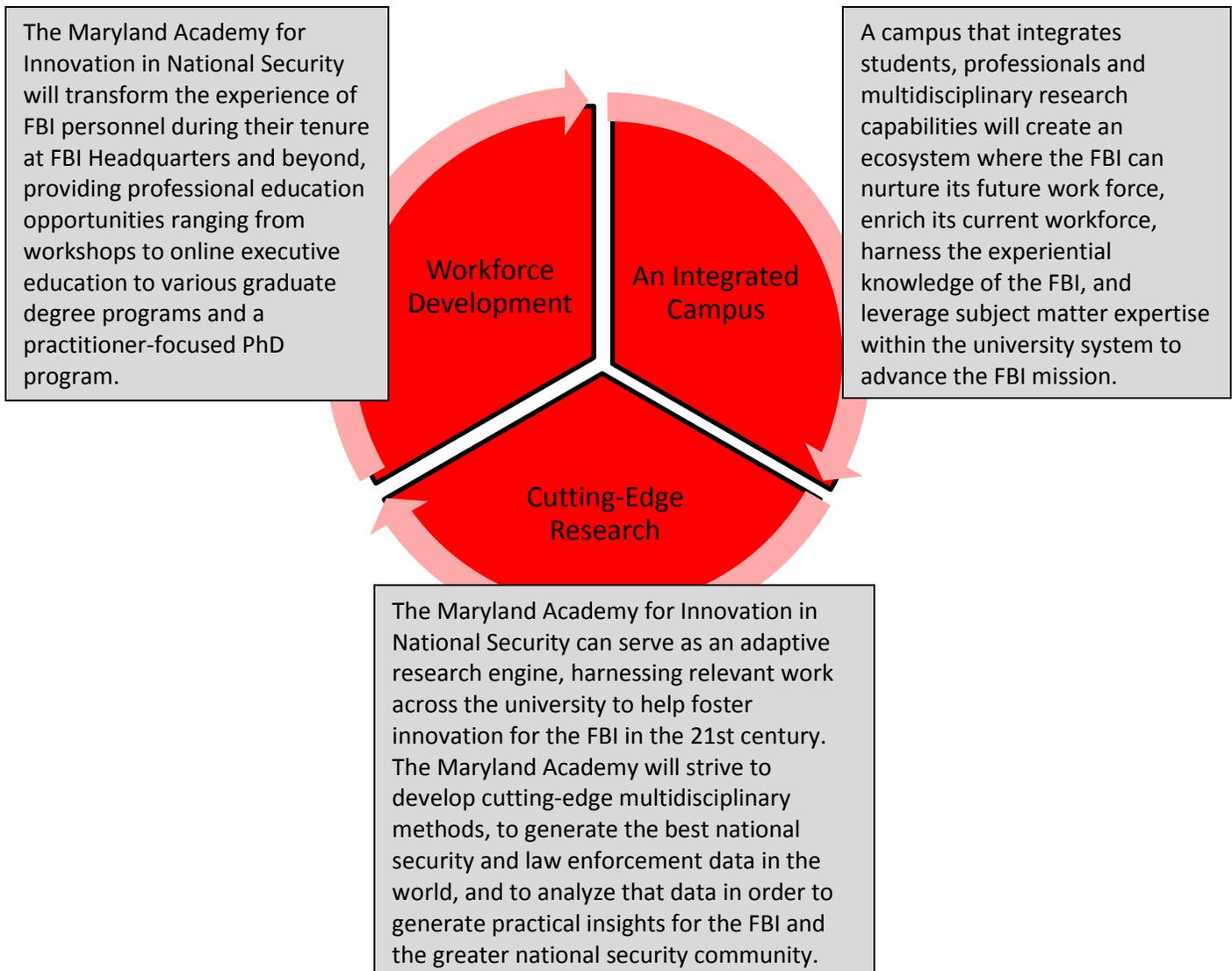




The Maryland Academy for Innovation in National Security: Supporting FBI Mission Priorities and Strategic Objectives

Maryland's two most powerful public research universities, the University of Maryland, Baltimore (UMB) and the University of Maryland, College Park (UMCP), are committed to working strategically and collaboratively with the Federal Bureau of Investigation (FBI) to help foster continuous innovation at the world's preeminent intelligence-led law enforcement organization. With appreciation for the FBI's Mission Priorities and Strategic Objectives, the University of Maryland will harmonize its relevant capabilities in terrorism and counterterrorism studies, intelligence analysis, cybersecurity and high performance computing, criminology and criminal justice, illicit trafficking, national security law, leadership, critical national security languages, homeland security and crisis management, and medicine and medical forensics. We will partner in highly relevant applied research efforts, incorporate the FBI's experiential knowledge and empirically-based findings into professional training, educate the next generation workforce of the FBI, and offer world class educational opportunities for FBI personnel during their tenure at FBI headquarters and beyond.



WORKFORCE DEVELOPMENT

The FBI's third Strategic Pillar focuses on "Talent," and the Maryland Academy concept is based on the understanding that the FBI's greatest asset is its workforce and that investment in its human capital will pay tremendous dividends over time. The Maryland Academy seeks to transform the experience of FBI personnel during their tenure at FBI Headquarters and beyond, and to help the FBI transform its recruitment and hiring practices.

HARNESSING THE EXPERIENTIAL KNOWLEDGE OF THE FBI

The FBI has been on a war footing since September 11, 2001. Interagency and international collaboration has increased, analysts have played a more important role as the FBI transitioned into an intelligence-led organization, investigative tactics, techniques and procedures have been enhanced, and FBI personnel have gained exceptionally valuable experiential knowledge. The Maryland Academy can help the FBI capture this expertise through collaborative programming, and disseminate it through publications and education and training initiatives for new FBI personnel, other federal, state, local and tribal law enforcement professionals, and international partners.

EDUCATING THE CURRENT WORKFORCE

Continuing Education Units: Life-long learning is the hallmark of professionalism and a necessity in a quickly evolving world. The Maryland Academy will facilitate the professional development of FBI employees by creating University of Maryland-approved continuing education units (CEUs) in relevant law enforcement and national security areas. When appropriate, Maryland Academy CEUs can be created in collaboration with FBI professionals to leverage their experiential knowledge and help to share it across the FBI and with state, local, tribal and international law enforcement partners. CEUs can be created for online or in-person formats.

Simulations: Within the Maryland Academy, the ICONS Project has thirty years of experience working with partners to create custom-designed simulations and scenario-driven exercises to strengthen decision-making, crisis management, strategic planning and effective communication. Simulations can be used at the organizational level to exercise contingency plans and test new policies and programs, or at the unit and individual levels to build skills. ICONS simulations can be conducted in-person or via the ICONS-Net platform to allow for participation from multiple locations across the FBI enterprise.

Executive Seminars and Workshops: The Maryland Academy possesses the space, expertise and experience to host dynamic executive seminars in a campus environment, with nearby hotels, restaurants and mass transit conveniently located to foster the most positive experience possible for participants. The Maryland Academy can bring national and international leaders, programs and opportunities for networking to the FBI's doorstep on a regular basis.

FBI Practitioner in Residence Program: To enhance the utility of this collaboration over time, the Maryland Academy commits to hosting Practitioners in Residence for sabbaticals sponsored by the FBI's Leadership Development Institute. Working with the resources available at the Maryland Academy and the broader university, these individuals can inform the research, education and training efforts underway, while actively identifying new opportunities for collaboration and identifying the most promising undergraduate and graduate students for recruitment into the FBI.

Graduate Certificates: Building on the University of Maryland Carey School of Law's certificates and specializations in cyber security and crisis management, the START Consortium's Graduate Certificate in Terrorism Analysis and the School of Public Policy's Graduate Certificate in Intelligence Analysis, the Maryland Academy will generate online and in-person graduate certificates, accredited University of Maryland coursework that either stands-alone as a credential or counts towards advanced degrees for most colleges and universities.

Masters Degree Programs: The Maryland Academy will bring together faculty from across the University of Maryland, coupled with experienced practitioners and policy-makers serving as adjunct professors, to create a

Masters in Innovation and National Security Degree Program. As the program matures and based on student demand, the Maryland Academy will develop tracks within the broader program to address critical areas of law enforcement and national security concern. This multidisciplinary program will complement the existing relevant degree programs already available through the University of Maryland. The Carey School of Law, in collaboration with the University of Maryland Center for Health and Homeland Security (CHHS), also offers a two-year mid-career Masters of Science in Law degree for non-lawyers with all courses held in the evenings on the College Park campus. The program is designed for professionals who need to know more about the intersection of law and regulation within the technical, scientific, or administrative demands of their chosen fields. The degree offers specialized tracks in 1) crisis management relating to counter-terrorism and homeland security; and 2) the law and policy of cybersecurity. Planning is ongoing to offer these MSL tracks on an online basis. The online program can be expanded to meet additional FBI needs.

Doctor of Philosophy (PhD) Program: The START Consortium will soon announce the launch of a practitioner-focused PhD program in collaboration with Leiden University in The Hague. By bolstering experiential knowledge with scientific methods, this program will allow practitioners from across the national security community to preserve the hard-fought lessons learned before and since 9/11, and apply new analytical methods to the most enduring counterterrorism challenges.

EDUCATING THE FUTURE WORKFORCE

The Maryland Academy will work with the FBI to shape classroom and experiential learning opportunities, preparing the next generation of national security professionals with the skill and passion necessary for the FBI in a rapidly evolving world. Through the Maryland Academy the FBI will be able to recruit from a student-body of undergraduate and graduate students immersed in multidisciplinary analysis and problem solving pertaining to the issues most pressing to the Bureau. The FBI will also be able to participate directly in teaching and mentoring these students through adjunct teaching opportunities and partnership on research efforts.

AN INTEGRATED CAMPUS

Imagine a brick-and-mortar research, education and training campus in which you are just as likely to run into a distinguished professor and national security subject matter expert, a mid-career Special Agent obtaining her PhD as she moves up the ranks, an intelligence analyst collaborating with a computer scientist to develop cyberterrorism-related training, or an intern on the verge of graduating into the workforce who has spent years working on an applied research project designed to help the FBI solve a problem. The Maryland Academy will create an ecosystem where the FBI can nurture its future work force, enrich its current workforce and leverage subject matter expertise within the university system to advance its mission.

The Maryland Academy will integrate spaces for research, education, training, networking and professional consultation.

- A flexible office lay-out will create opportunities for different university resources to plug into to the Maryland Academy for specialized projects and pilot collaborations.
- Smart classrooms will host in-person and online classes, ranging from Continuing Education Units to undergraduate and graduate classes to PhD-level coursework. Online education capabilities will help expand the impact of the Maryland Academy beyond FBI Headquarters.
- An auditorium-style lecture hall will serve as a venue for executive seminars and large-scale briefings, and may also provide an ideal alternative venue to FBI Headquarters for unclassified events involving state, local and tribal law enforcement partners, private sector partners or foreign nationals.
- A component of the Maryland Academy located just off campus, the University of Maryland's Center for the Advanced Study of Languages (CASL) is a large sensitive compartmented information facility (SCIF) with a long history of working directly with the national security community.
- An Immersive Environment Training Lab will allow the FBI to evaluate new training technologies, such as augmented or virtual reality training aids, for potential adoption at the FBI Academy.

- High Performance Computing (HPC) labs will allow for sophisticated data collection, coding and analysis, as well as role-play simulations that can be used for education and training.
- Office space will be available to host government partners, ranging from Practitioners in Residence on Leadership Development Institute-sponsored sabbaticals for longer-term integration into the Maryland Academy, to drop-in visits from professionals working with researchers and students throughout a project lifecycle to ensure maximum benefit for the government.
- Undergraduate and graduate student interns at workstations adjacent to the offices of their mentors will work on real-world research projects, collaborating with practitioners and researchers in a novel experiential learning environment.
- Break-out rooms equipped with white boards and audio-visual equipment will facilitate brainstorming sessions and team meetings.
- A video-conference room will allow for in-person and long-distance dialogue, consultation and collaboration.
- A multi-media studio will allow for the creation of audio-visual content for education and training purposes, as well as opportunities to train media engagement and public affairs skills.
- A small event space, kitchen and dining area, and an exercise facility will allow for informal networking, team-building and increased productivity and efficiency for staff, students and affiliates.
- Ready metro-access and visitor parking will facilitate in-person collaboration.

BUILDING CAPABILITY THROUGH CUTTING-EDGE RESEARCH

The FBI's first Strategic Pillar focuses on capability by investing in leadership, incorporating intelligence in FBI processes, enhancing cyber capabilities, and strengthening partnerships. The FBI's second Strategic Pillar focuses on enhancing the FBI's use of technology. The Maryland Academy for Innovation in National Security can serve as an adaptive research engine, harnessing relevant work across the University System to help advance these strategic objectives and foster innovation for the FBI in the 21st century. The Maryland Academy will strive to develop cutting-edge multidisciplinary methods, to generate the best national security data in the world, and to analyze that data in order to generate practical insights for the FBI and the greater national security community.

SUBJECT MATTER EXPERTISE

The University of Maryland includes top-rated departments and research programs of direct relevance to the FBI.

Terrorism and Counterterrorism: At the center of the Maryland Academy sits the National Consortium for the Study of Terrorism and Responses to Terrorism (START), the world's largest unclassified terrorism research, education and training center. Led by Gary LaFree, a distinguished criminologist, and Bill Braniff, a terrorism expert with extensive experience providing training for the FBI, Department of Justice, and state, local, tribal and international law enforcement officers, START is the preeminent source of terrorism data for the United States Government and a leader in counterterrorism and countering violent extremism (CVE) research, education and training, with related portfolios covering non-state use of unconventional weapons and technology, risk and crisis communication, radicalization, insider threat, transnational criminality, political instability, risk assessment, and geo-spatial information sciences (GIS). Available nearby is the University of Maryland Center for Health and Homeland Security (CHHS), which has a professional staff of over 50 personnel working on over 90 contracts worldwide delivering expertise in crisis management planning, training and the development and execution of table-top and full-scale exercises testing the readiness of public institutions to respond to terror attacks, deadly and fast moving emerging infectious diseases, and overwhelming adverse weather conditions. CHHS also regularly advises and trains prosecutors and judges on legal, evidentiary, and procedural issues that arise in counterterrorism investigations or prosecutions; or in dealing with legal and policy responses to the rapid spread of deadly infectious viral diseases such as Ebola and Zika.

Intelligence Analysis: The School of Public Policy has been designated as an Intelligence Center of Academic Excellence through a complete grant program administered by the Defense Intelligence Agency, and currently offers a graduate certificate in intelligence analysis. The Center for the Advanced Study of Languages (CASL) works

with the intelligence community to successfully transition rigorous research into the operational environment and assess its impact.

Cybersecurity: The Maryland Cybersecurity Center (MC2) brings together not only faculty with expertise in the core areas of computer science and electrical engineering but also those with backgrounds in economics, social science, human-computer interaction, and engineering. MC2 has particular strengths in cryptography, programming-language and software security, behavioral aspects of security, empirical security, and cybersecurity economics. The center has a three-fold mission focusing on research, education, and outreach, and emphasizing on frequent interaction with federal agencies and corporate partners. In addition, the University of Maryland Carey School of Law in conjunction with the University of Maryland Center for Health and Homeland Security (CHHS) currently offers 1) an evening two-year executive education specialization in cybersecurity law and policy for mid-career non-lawyer professionals in its Masters of Science in Law degree program at College Park; and 2) a one-year Masters of Law program for lawyers on Law and Policy in Cybersecurity, with an emphasis on investigating and prosecuting cybercrimes. Moreover, through CHHS's development of extensive executive-level academic cybersecurity courses, its consultation with many government cybersecurity commissions, its collaborative work with cyber technology companies, and its work on cybersecurity legislation with Congress and in state legislatures, CHHS has amassed vast knowledge of cyber law and evidentiary presentations, cyber planning, and training to keep its partners protected and informed in this area.

High Performance Computing: With several supercomputing facilities, including one funded by several U.S. Government agencies, the Maryland Academy will offer a unique cyber test range for FBI information technology and cyber professionals, as well as a cadre of students to mentor and recruit from upon graduation. Additionally, the College of Behavioral and Social Sciences (BSOS) maintains a keen interest in computational social science, a field with tremendous promise for national security professionals who are only starting to see the benefits of "big data."

Criminology and Criminal Justice: The University of Maryland is proud to claim the top ranked criminology and criminal justice (CCJS) department in the nation, with a faculty that includes the former heads of the Bureau of Justice Statistics (James Lynch) and the National Institute of Justice (John Laub). The mission of CCJS is to consult with the highest levels of government (nationally and internationally) on policy-based research and to serve as a primary resource on crime and justice matters for federal, state and local policy makers. Within CCJS, the Maryland Data Analysis Center (MDAC) harnesses data to improve public safety and to ensure that the criminal justice system operates in a fair and cost-effective manner. The Carey School of Law could partner with CCJS to create a unique training opportunity for the FBI. In addition, the Center for the Study of Business, Ethics, Regulation and Crime (C-BERC) within the Smith School of Business links business with criminology in an effort to assess, evaluate and develop best-practices in preventing white-collar crime.

Illicit Trafficking: START's Transnational Illicit Trafficking project (TransIT) models the flow of illicit goods and persons globally. In addition, a new center focused on supporting survivors of human trafficking will provide research opportunities and insights that may help professionals to minimize the negative impacts of human trafficking.

Law: The University of Maryland Carey School of Law offers a highly ranked part-time and full-time J.D. program in Baltimore, as well as a series of specializations within its Masters of Science in Law and Masters of Law degree programs at College Park, to include specializations in crisis management, cybersecurity, counterterrorism, national security, environmental law, patent law and health care law. The School of Law is well situated to create additional specializations to meet the needs of the FBI and, if desired, to make some of those courses online.

Leadership, Innovation, Planning and Decision-Making: The Maryland Academy is poised to support the FBI's Leadership Development Institute. The Robert Smith School of Business engages in Leadership Development research and training for the Federal Government, as does the ICONS Project, which designs custom simulations for research, education and training purposes, on leadership, contingency planning and communications. Extending the entrepreneurial ethos cultivated within the business school, the Academy for Entrepreneurship and Innovation (AEI) was launched by UMCP President Wallace Loh in 2013 and charged with engaging every student on campus

in innovation & entrepreneurship (I&E) experiences to prepare them to tackle the world's toughest problems. The University of Maryland Center for Health and Homeland Security (CHHS) has a cooperative agreement with the U.S. Department of State Office of Antiterrorism Assistance to conduct senior crisis management seminars for top level foreign delegations focused on all areas of homeland security, counterterrorism and emergency response. Through these seminars, which often include or are composed of leading foreign law enforcement and intelligence officials, CHHS has created an extensive list of subject matter experts who are the leaders in their respective fields including mass casualty planning and response, incident command systems, crisis communications, human rights, critical infrastructure protection, and investigating and prosecuting terrorism.

Foreign Language: As mentioned, UMCP is home to the Center for the Advanced Study of Language (CASL), a premier strategic research partner for the Intelligence Community solving the most critical and challenging language problems, advancing the nation's capabilities in language, culture, analysis, learning, and human performance. The University of Maryland also boasts the only Persian flagship program and one of only five Arabic flagship programs in the country – undergraduate programs that bring students to a “superior” level of fluency before graduating. This same expertise is applied to UMCP's Arabic and Persian Summer Institutes, which cater to professionals and students at beginner, intermediate and advanced levels. Finally, the National Foreign Language Center (NFLC) develops unique language training materials and modules for the U.S. Government.

Emergency Preparedness and Emergency Response: The University of Maryland Center for Health and Homeland Security (CHHS) works with top emergency responders at all levels of the public and private sectors across the globe to develop plans, policies and strategies that ensure the safety of citizens in the event of natural or man-made catastrophes. As mentioned above, CHHS with the Maryland Carey Law School offers a specialization in crisis management law and policy through its mid-career evening Masters of Science in Law degree program; as well as an LL.M program in crisis management. CHHS also regularly conducts trainings at all levels of government in the United States and abroad in responding to catastrophic events caused by natural and man-made events. In addition, the ICONS Project, housed at START, conducts simulations designed to test emergency preparedness policies, plans and procedures. START's FEMA accredited Training in Risk and Crisis Communication (TRACC) leverages an ICONS simulation as it enhances students' crisis communication skills.

Arson Research and Fire Protection Engineering: The University of Maryland offers the nation's only fully accredited fire protection undergraduate program and one of three graduate degree programs in the US. More than 1,100 graduates from the Department are employed in industry, insurance companies, Federal, state and local government, military and fire service. The BATF National Forensics Lab and FIRE Research facility is located near the UMCP campus offering partnership and joint research opportunities.

Bio-medical Sciences: The University of Maryland hosts graduate programs in biomedicine, medical forensics, nursing, dentistry, and pharmacy, and maintains advanced analytical instrumentation for biomedical research. In addition, the University of Maryland School of Medicine is home to the Institute for Genome Sciences, which possesses deep expertise and has performed forensic genomic analysis on behalf of the FBI in the U.S. Senate anthrax case. It is also home to the Center for Vaccine Development, which has deep expertise in bacterial and viral biology, detection, treatment and prevention with vaccines.

Human-Technology Interaction: Building on the capabilities of the virtual and augmented reality capabilities of the Augmentarium and the forthcoming Irbe Building, the Maryland Academy will provide an immersive environment training laboratory for the FBI, a test-bed where new training technologies funded by companies like Lockheed Martin can be evaluated for adoption by the FBI Academy at Quantico.



**UNIVERSITY
OF MARYLAND
MPOWERING
THE STATE**

About MPowering the State

The University of Maryland: *MPowering the State* brings together two universities of distinction to form a new collaborative partnership. Harnessing the resources of each, the University of Maryland, College Park and the University of Maryland, Baltimore will focus the collective expertise on critical statewide issues of public health and safety, biomedical informatics, and bioengineering. This collaboration will drive an even greater impact on the state, its economy, the job market, and the next generation of innovators. The joint initiatives will have a profound effect on productivity, the economy, and the very fabric of higher education.