



The University of Maryland
Center for Health & Homeland Security

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Director's Message

By Michael Greenberger, CHHS Founder and Director



*Founder and Director
 Michael Greenberger, JD*

As we approach the mid-point in our 18th year of operations, I wanted to address the question that is most often posed to us: What is the full scope of CHHS's activities? Even those who know us well—whether they be our supporters, clients or students—only see that part of our work with which they have direct contact. They often do not see the entirety of our broad efforts. I want to address that general inquiry here.

The University of Maryland Center for Health and Homeland Security (CHHS) is an academic, non-profit, self-funded consulting institution. We work with the nation's federal, state, and local emergency and public health first responders and planners to prevent or respond to crises concerning counterterrorism; cyber security; emerging infectious diseases; and serious life threatening adverse weather conditions. We also work in these areas with hospitals, other health care facilities, school systems, and institutions of higher education.

We work on over 90 projects worldwide. Our staff is composed of more than 40 full-time professionals, holding advanced degrees in emergency preparedness, homeland security, law, public policy, and public health. Over 200 of our alumni have gone on to hold important leadership positions in the public and private sector.

CHHS also has a cooperative agreement with the U.S. Department of State's Office of Anti-Terrorism Assistance to conduct "Senior Crisis Management Seminars" for delegations of foreign senior government and law enforcement officials. Each seminar is tailored to target the country's specific crisis management needs, as determined by our staff conducting an in-country site assessment, resulting in a seminar held on campus at the University or in-country. We have run over 40 of these seminars, including in-country trainings in Jordan, Pakistan, Tanzania, and Ecuador.

Through our State Department partnership, we have also conducted trainings for international judges and prosecutors on best practices for terrorism investigations, prosecutions, and trials.

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CHHS Staff



First Row (left to right): April Doss, Senior Fellow; Sarah Wetter, Senior Law & Policy Analyst; Megan Timmins, Associate Director; Michael Greenberger, Director; Heather Shaivitz, Associate Director; Tiffany Smith, Policy Analyst; Lisa Crow, Recovery Program Director; Jaime McCoy, Research Assistant.

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Third Row (left to right): Matilda Channel-Ward, Accountant; Nicole Regino, Law & Policy Analyst; Joe Corona, Senior Policy Analyst; Kirby McMahon, Law & Policy Analyst; Alexander Batton, Extern.

Fourth Row (left to right): Shanna Batten, Community Resilience Initiatives Program Director; Danyel Hafeez, Senior Policy Analyst; Hassan Sheikh, Senior Law & Policy Analyst; Samantha Durbin, Senior Policy Analyst; Ian Hamilton, Senior Policy Analyst; Michael Tennison, Senior Law & Policy Analyst; Ben Yelin, Public Policy & External Affairs Program Director.

Fifth Row (left to right): Michael Block, MSL student; Christopher Webster, Public Safety Technology Program Director; Markus Rauschecker, Cybersecurity Program Director; Maggie Davis, Senior Law & Policy Analyst; Michael Vesely, Academic Program Director.

Staff not pictured: Ellen Cornelius, Senior Law & Policy Analyst; Jason Rubinstein, Senior Law & Policy Analyst.

Director's Message (continued)

Continued from cover

Our Services Include

Counterterrorism law, policy and planning

Public health preparedness and response, including hospital preparedness

Pandemic response, include planning and exercises on the distribution of mass prophylaxis

Cybersecurity planning and response

Continuity of operations planning

Emergency operations planning

Evacuation planning and operations

Conducting training of personnel and table top and field exercises

Post-disaster recovery and rebuilding planning and operations

Climate change planning

Crisis communications strategies

Community policing

Combating violent extremism

CHHS has also developed and oversees various graduate academic programs.

In conjunction with our partner, the University Of Maryland Carey School Of Law, we have created, supervise and teach courses leading to a JD Certificate and an LLM specialty in Cybersecurity and Crisis Management Law.

We have also developed an online Masters of Science in Law (MSL) degree in both Cybersecurity and Homeland Security and Crisis Management Law. The MSL degree is aimed at mid-career professionals who desire training on the law and regulation of cybersecurity and homeland security and how these laws intersect with the technical, scientific, or administrative demands of their jobs.

Under these programs, CHHS has developed and teaches courses on:

1. Homeland Security and the Law of Counterterrorism
2. The Law and Policy of Emergency Public Health Response
3. The Law and Policy of Emergency Management
4. The Law and Policy of Cybersecurity
5. Cybercrimes
6. International Law and Cybersecurity
7. Cyber Boot Camp: Cyber Technology for Lawyers
8. National Security, Electronic Surveillance and the Fourth Amendment
9. Law and Policy of Inner City Policing
10. The Opioid Epidemic: Law and Policy to Address a Nationwide Public Health Crisis

These courses are also being adjusted to be taught to undergraduates at the University of Maryland College Park (UMCP), pursuant to that campus's minor in law.

As I mentioned, our consulting work is self-funded through our client contracts. We also engage in considerable pro bono consulting work for institutions that need, but cannot afford, our services. For example, we do webinars and trainings for many small health care facilities, especially nursing homes, which badly need emergency planning services. History has shown us that nursing homes and assisted living facilities experience disproportionate fatalities when catastrophic emergencies, such as hurricanes, hit.

We have also developed a community resilience program to guide and support communities in building and expanding efforts to prevent violence. Our methodology leverages existing community assets to responsibly and respectfully address dynamics that contribute to the threat of ideologically-influenced violence. In this regard, in almost every U.S. mass shooting, the perpetrator was known to authorities beforehand. For obvious reasons, law enforcement reporting is worrisome to family members and other close associates. After the recent mass shootings in El Paso and Dayton, many in the media endorsed the kind of program we have developed, but, unfortunately, public funding remains scarce. We are actively pursuing other sources.

Enjoy the newsletter!



Preventing Domestic Terrorism: CORE Framework Moves Beyond Theory to Action

The mayhem of targeted violence is detrimental to our communities' civic processes and sense of safety. The "threat from within" permeates our national dialogue at local and federal levels. The Washington Post recently published an article detailing how threats made in the wake of the 2017 Unite the Right rally in Charlottesville caused an African American political candidate to terminate his bid for local office. This month, the U.S. Department of Homeland Security released a strategic document, emphasizing the department's intent to implement a whole-of-society, strategic framework to prevent acts of domestic terrorism. The document asserts the need for community-based prevention through intentional efforts to build trusted networks and resilience at the community level.

Dialogue across sectors is critical to establishing strategic approaches to preventing targeted violence and domestic terrorism. As a center for both policy and implementation guidance, CHHS continues to contribute important insights to this dialogue from the vantage point of effective implementation at local and state levels. In September, the Carnegie Endowment for International Peace convened leaders from think-tanks, non-profit organizations, academia, and private foundations to tackle the complex potential for violence connected to troubling domestically-based ideological trends. Shanna Batten, CHHS's Program Director for Community Resilience



Communities Resilience Initiative Program Director Shanna Batten shares her expertise with community leaders and stakeholders.

Initiatives and a native of Charlottesville, was invited to discuss the importance of community-based and community-led prevention systems. She noted that, before the violent rally of 2017, Charlottesville had been named one of the top five most desirable communities in the United States. Batten emphasized that whether targeted violence comes to a community or from within a community, a locally agreed-upon system of prevention is fundamental to building and reinforcing community resilience and thus an important element of prevention. In highlighting the promise of CHHS CORE (Communities Organized for Resilience and Empowerment) framework, she noted that by merging vetted methodologies of emergency preparedness, public health, and collective impact, CORE standardizes the process by which communities build their local prevention infra-

structures, a consistency of effort that is critical to growing a national network of prevention. Importantly though, CORE allows communities to customize the infrastructure in a way that maximizes existing community assets and enhances available prevention resources.

The threat of mass attacks propelled by ideology continue to menace communities throughout the United States. It is clear that prevention efforts need to move beyond theory and must develop comprehensive plans of action to the threat of targeted violence. Frameworks such as CORE work across sectors and authentically engage with communities. Beyond "see something, say something," communities must be responsibly empowered to do something to prevent targeted violence at much earlier stages.

CHHS Co-Hosts New Cybersecurity Podcast



Public Policy & External Affairs Program Director Ben Yelin co-hosts the new CyberWire podcast, Caveat.



For the past several years, CHHS has collaborated with the CyberWire podcast as an academic research partner. The CyberWire daily podcast is hosted by the Maryland-based CyberWire news service, which delivers real-time cybersecurity news updates to a global audience. CHHS Public Policy & External Affairs Program Director Ben Yelin has been a frequent guest on the daily podcast, discussing news items related to cybersecurity law and policy. CHHS Cybersecurity Program Director Markus Rauschecker has contributed as a guest as well.

As public interest in cybersecurity law and policy interest has intensified, CHHS and the CyberWire have decided to partner on a new podcast, Caveat. Yelin co-hosts the podcast with CyberWire daily podcast host Dave Bittner. The podcast premiered in early October, and is released each Tuesday morning. This podcast is

an informal, lively conversation on cybersecurity law and policy issues, with a particular focus on surveillance and digital privacy. Yelin and Bittner analyze important current legal cases, policy battles, and news headlines that affect cybersecurity stakeholders. Recent topics have included:

- Fourth Amendment jurisprudence in the age of digital surveillance
- Encryption
- Federal cybersecurity statutes
- Data privacy legislation

Though the podcast has a legal focus, it is not intended solely for lawyers—the audience includes security professionals, businesses and practitioners. The goal of the podcast is to

distill complicated legal issues into something accessible and interesting to anyone in the cybersecurity field.

CHHS is always interested in collaborating with public and private sector partners to share its subject-matter expertise, and discuss issues relevant to our work. We are particularly pleased that Caveat gives us an opportunity to reach a larger global audience through a 21st Century media platform.

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Public Health Response: Preparing for New Foes and Old Enemies Alike

Public health emergencies have made headlines in recent months, for issues as varied as vape-related respiratory illnesses, to the increase in cases of chronic-wasting disease, a deer-borne prion that can cause symptoms in deer similar to those of mad cow disease. In May, the Centers for Disease Control warned that the United States was in danger of losing its measles-elimination status due to ongoing outbreaks. This summer, several states reported multiple human cases of Eastern Equine Encephalitis, a mosquito-borne virus that has been rare in the U.S., and Americans watched as Hurricane Dorian devastated the Bahamas - the public health impact of which will likely be felt for years.

While an emerging deer-borne disease may seem unrelated to providing medical care in a hurricane-devastated area that lacks power or clean water, these events have one thing in common: they require a strong, efficient public health response to ensure human life and safety. Every day, CHHS public health staff provide our clients with the expertise and experience to respond in the best way possible, regardless of the threat.



Players in the National Capital Region Metropolitan Statistical Area Cities Readiness Initiative Full Scale Exercise acted as mock patients in Prince George's County to test the County's Point of Dispensing operations during an outbreak.

One key building block to an efficient response is a jurisdiction's ability to disperse needed supplies—be it medical supplies or mass vaccination clinics. A jurisdiction's Point of Dispensing (POD) plan is just such a building block. During an outbreak, PODs can be used to dispense medications rapidly to the public, such as antibiotics to respond to a bioterrorist attack

or flu vaccinations. For example, during the National Capital Region Metropolitan Statistical Area Cities Readiness Initiative Full Scale Exercise, CHHS Senior Policy Analyst Kim Stinchcomb worked with the NCR and Prince George's Health Department to test its POD operations. The exercise included partners from Prince George's



CHHS the Video

Learn more about who we are and what we do:
www.youtube.com/MDCHHS.



CHHS Law & Policy Analyst Nicole Regino works with the Prince George's County Health Department to advance behavioral health planning during disasters.



Program Directors Eric Oddo and Michael Vesely evaluate the Prince George's County Health Department Point of Dispensing operations as part of the National Capital Region Metropolitan Statistical Area Cities Readiness Initiative Full Scale Exercise in July.

Law Enforcement, Public Schools, Office of Emergency Management, Medical Reserve Corps, and the Office of Central Services—a list that shows how much coordination goes into a “public health” response.

As with most plans, POD plans are constantly evolving. Updates from the NCR exercise will be incorporated into a revised POD plan, and Stinchcomb will ensure future trainings incorporate the findings of this exercise. Similarly, CHHS Senior Law & Policy Analyst Hassan Sheikh, who in April helped lead two free measles mass vaccination clinics in Baltimore City through the

Baltimore City Health Department, is now working to train others on lessons he learned through implementing the POD model. Sheikh has stressed that he believes “that if you’re capable of doing something once, then you are capable of doing that thing better next time.”

Of course, this is just one part of public health response. CHHS staffers continue to help our clients with all parts of public health

response, including Senior Law & Policy Analyst Maggie Davis’ hazard vulnerability analysis work for the Maryland Region V Emergency Preparedness Coalition, and Law & Policy Analyst Nicole Regino’s work in Prince George’s County helping to advance behavioral health planning for disasters, and much more. Whether it’s a response to the seasonal flu or a novel disease, CHHS’ work continues to advance health security.



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[HTTP://WWW.MDCHHS.COM](http://www.mdchhs.com)

CHHS' Cybersecurity Program Adds Strategic Partnerships

Academic Program in Cybersecurity Law and Policy

Fall is always an exciting time at CHHS. Fall signals the beginning of a new academic year and the arrival of many new JD, LLM, and Master of Science in Law (MSL) students to the University of Maryland Carey School of Law. Every year the number of law students pursuing the Certificate in Cybersecurity and Crisis Management Law increases and many incoming students choose to attend Maryland Carey Law specifically because of our programs and the opportunities that CHHS provides. We're looking forward to working with all of our students and can't wait to see what they accomplish after graduation.

New Collaboration with the University of Maryland Baltimore County (UMBC)



Having a technical understanding of cybersecurity is a huge benefit to any lawyer wishing to be active in the cybersecurity field and that's why our program incorporates opportunities for our students to familiarize themselves with relevant technology. We already offer our Cyber Boot Camp: Tech for Lawyers course at Maryland Carey Law, but we are now also working with the University of Maryland Baltimore County (UMBC), an NSA/DHS

accredited Center of Excellence, to encourage law graduates to obtain a Master's of Professional Studies in Cybersecurity. Law students who obtain our Certificate in Cybersecurity and Crisis Management may transfer up to 12 credits toward the UMBC Master's degree. This credit transfer means that students can add a technical Master's degree to their JD degree in an accelerated timeline. We think students will be thrilled to take advantage of this opportunity.

New Partnership with the National Cybersecurity Center of Excellence (NCCoE)

CHHS and the NCCoE have launched a partnership through which students can get practical experience working on cutting edge law and policy issues. The National Cybersecurity Center of Excellence (NCCoE), is a part of the National Institute of Standards and Technology (NIST), and is a collaborative hub where industry organizations, government agencies, and academic institutions work together to address businesses' most pressing cybersecurity issues. CHHS externs will have the opportunity to work at the NCCoE, side by side with government and industry stakeholders, to address law and policy issues related to current real-world challenges. The NCCoE is located in Gaithersburg, MD and is another example of why Maryland is one of the premiere places for anyone who wants to be involved in cybersecurity.

Recovery Project Spotlight: Montgomery County Pre-Disaster Recovery Plan

Montgomery County was the first jurisdiction in Maryland to develop a Pre-Disaster Recovery Plan in 2013. Since then, the state of Maryland and the country have experienced several catastrophic incidents requiring long-term recovery efforts. Beginning in January 2019, CHHS has led the revamp of the County's Pre-Disaster Recovery Plan, harnessing the many lessons learned throughout the state and country. The revitalized Pre-Disaster Recovery Plan includes the following three sections:

Basic Plan

Describes the overarching strategy for how the County will organize and coordinate in the aftermath of a disaster. Additionally, provides descriptions and an overview on key recovery concepts.

Recovery Support Functions

Provides the structure and identifies organizations involved in executing recovery activities.

Annexes

Details specific processes and procedures and provides templates for completing specific recovery tasks.



Recovery Program Director Lisa Crow leads a small group discussion during a Montgomery County Recovery Support Function Workshop in September.

On July 8, 2019, Montgomery County and surrounding areas experienced a period of intense, heavy rain that led to flooding, downed trees, power lines, and many swift water rescues. Since Arlington, Virginia was granted a U.S. Small Business Administration (SBA) declared disaster designation, Montgomery County automatically received assistance from the SBA Disaster Loan Assistance as a contiguous County. The County was able to use one of the Annexes created by CHHS titled "Small Business Administration Request Process," for support in completing operational tasks to offer SBA resources to the community.

This past August, the draft Basic Plan was distributed to County stakeholders for their review and to provide CHHS with feedback on Plan enhancements. Additionally, in August, CHHS led recovery stakeholder workshops to review the Plan components and to further capture the roles and responsibilities of County agencies in recovery. The draft Recovery Support Functions will be released for review and comment later this fall.

In mid-December, CHHS will facilitate a table-top exercise for the County's Senior Management Team (SMT) to walk leaders through the concepts of the completed Pre-Disaster Recovery Plan and to provide an opportunity to apply the Plan into action through a disaster scenario.

Funds for the Center for Health and Homeland Security are administered by the University of Maryland, Baltimore Foundation, Inc.

Getting the Most Out of Your Emergency Radios

Effective communications are critical to disaster response, but day-to-day communications systems like cellular networks, office phone lines, and chat or e-mail servers can be unreliable during disasters, especially during periods of extended power outage. Two-way radios can be a reliable and effective backup communication solution for organizations of all types and sizes. Commercially available UHF and VHF radios are a popular way for organizations like hospitals, schools, and private businesses to maintain communications during and after disasters. Unfortunately, improving your organization's disaster preparedness is not as simple as simply buying a snazzy set of new radios. All too often, CHHS finds that our clients who have chosen to invest in commercial two-way radio systems are often not able to effectively use them during disasters or exercises. Below are some simple steps your organization can take to get the most out of an investment in two-way radios.

Understand Radio Features and Limitations

Radios can be deceptively complicated pieces of technology, and often contain features and functions that are unfamiliar to the novice user.



Public Safety Technology Director Chris Webster provides technology and communications training, governance, policy development, and implementation guidance to public and private sector clients.

It is important to understand the functionality and limitations of your radio system. At the most basic level, you need to understand the range of the radios. It can be difficult to know exactly how well a radio will work in a particular environment, building, or vehicle – and it is important to work with the radio vendor to select a system that is well-suited to your needs. That said, there is no replacement for hands-on testing to identify dead zones and areas of limited coverage. Other technical aspects to understand include:

- How are radios to be programmed and updated?
- How many radios can be added to the system?
- When will critical components like radio batteries need to be replaced?
- What are the potential points of failure in the radio system? For example, does your radio system rely on signal repeaters that need steady power?
- How rugged are the radios, and is that level of durability consistent with how and where they will be used during a disaster?

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Build An Effective Disaster Radio Cache

For organizations that do not use radios on a daily basis it is often impractical to issue every staff member their own radio. Instead, a limited number of radios can be purchased and distributed from a central cache to critical staff during a disaster. Maintaining a radio cache is a great way to improve your organization's disaster preparedness, but there are some common pitfalls to avoid. When setting up a cache of disaster radios CHHS recommends that an organization:

- Assign a specific individual to be responsible for maintaining the cache.
- Have a plan for keeping the radios charged and maintained.
- Clearly label each radio with a unique ID and maintain a simple to follow inventory of radio equipment.
- Create simple one-page "quick study" guide on radio operations to hand out with radios.

Have A Plan For Using Your Disaster Radios

Ensure that the location, use, and capabilities of your organization's radio cache are clearly detailed in your organization's Emergency Response Plan. When handing out radios during a disaster or exercise, have a plan for tracking who has each radio. CHHS recommends that radios be distributed by role or position, as opposed to being issued to specific individuals. This way the radio for a given position can be easily transferred when there is a shift change. For organizations with a large number of radios, a formal plan for dividing up radio channels should be developed to keep communications organized and efficient. Where applicable, a radio channel plan should be handed out with the radios, and users should always be informed which channels are being continuously monitored for emergency or mayday communications.

Practice is Key

Radio cache use needs to be regularly drilled and incorporated into other disaster preparedness exercises. Regular practice ensures that staff are comfortable with radio use before a disaster occurs. Moreover, exercising radio distribution and use helps to identify gaps in planning and radio coverage. It is also critical to helping ensure that the radios themselves are in working order, hold a charge, and are properly programmed.



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Recent Emergencies in Baltimore Demonstrate Criticality of Robust Continuity Planning



Continuity Program Director Eric Oddo trains state and local government officials, law enforcement, and educational institutions on continuity planning.



For the last year, Program Directors Christopher Webster and Eric Oddo worked with the Housing Authority of Baltimore City (HABC) on its Emergency Preparedness and Response Plan. Here, they meet with Janet Abrahams, Executive Director of HABC, during a tabletop exercise to test the plan.

Continuity of Operations (COOP) planning is a process to ensure an organization's ability to seamlessly continue its mission essential functions in response to a natural or manmade emergency event. CHHS, as a nationally recognized leader in the field, has successfully managed continuity projects for dozens of federal, state, county, and municipal government agencies, hospitals, and academic institutions around the United States. The total number of continuity plans and programs developed numbers well into the hundreds.

While continuity planning can seem at times to be a rhetorical and obscure topic, in that it's a plan that

organizations hope they never have to actually utilize, there have been three recent high-profile events in our own hometown of Baltimore that shine a light on the three fundamental types of emergency scenarios that can necessitate the activation of a continuity plan: the incapacitation of a facility, the incapacitation of a key resource, and a reduction in available staffing levels.

The first event, which exemplifies the incapacitation of a facility, was the evacuation of a four-block radius around 100 E. Pratt Street in downtown Baltimore on September 9th. A suspicious van filled with diesel fuel was discovered in a parking garage at the beginning of the workday. In the interest of

caution, first responders ordered a full evacuation of the area while the situation could be properly investigated, and the existence of a bomb or other nefarious device could be ruled out. By the end of the day, it was determined that there was no bomb or threat present, but this situation highlights the importance of organizations being prepared for "no-notice" emergency events which may instantly render their facility unusable for an indefinite period of time. Businesses and government agencies with time sensitive essential functions were forced to institute continuity plans and procedures, not knowing how long their facilities would be uninhabitable.

The second event, which exemplifies the loss of a key resource, was the 2019 Baltimore ransomware attack. On May 7, 2019, most of Baltimore's government computer systems were infected with a new and aggressive ransomware variant named RobbinHood. Most city servers were taken offline. In a ransom note, hackers demanded 13 bitcoin (roughly \$76,280) in exchange for keys to restore access. The note also stated that if the demands were not met within 4 days, the price would increase and within 10 days the city would permanently lose all of the data. As a result of this emergency, City agencies were forced to either defer key functions until the emergency had ended (not knowing how long that might take), or develop manual, paper-based workarounds so that technology-dependent functions could be performed at a baseline level.

The third event, which exemplifies a reduction in available staffing levels was a water main break that took place at the intersection of Pratt and Howard Streets on July 8, 2019. A day later, a portion of the sidewalk and elevated platform of the Convention Center/Pratt Street Light Rail station had collapsed into the roadway. As a result of these events, there were an abundance of street and Light Rail station closures throughout downtown Baltimore. These made commute times for many Baltimore workers much longer, and adversely affected their ability to access the downtown area. It's critical that

within the context of continuity planning, organizations are prepared for situations that may hinder their employees' ability to physically access their office and plan for the execution of essential functions accordingly.

These types of events are not unique to Baltimore; they occur all over the world on a regular basis. As such, there is a need for planning, training, and education in this field. CHHS is unique amongst its peers nationwide in that it is both a consultant and educator in the realm of emergency management. One of the key challenges for any organization –

governmental or private – is how to take an emergency plan that has been developed and socialize and train its content to employees and stakeholders. CHHS, over the past decade, has delivered a two-day, FEMA-accredited continuity course in over 30 states, encompassing thousands of students. The CHHS instructors who teach this course are often the same ones who manage continuity projects for clients. This ability to motivate and inspire people how to learn and understand the terms, concepts and methodology of continuity planning pays enormous dividends in the safety of CHHS' clients.

CHHS in the Community



Senior Law & Policy Analyst Clark J. Lee and his colleagues from the Montgomery County Department of Health and Human Services set up an information booth at a public outreach event in Silver Spring during National Public Health Week.

Student Spotlight: Mark Cather

Cybersecurity threats, crimes, and harms have become some of the largest threats to our society. The White House estimates that cybercrime cost the United States economy somewhere between \$57 billion and \$109 billion in 2016 alone.¹ Moreover, some experts estimate that by 2021 cybercrime could cost the global economy as much as \$6 trillion annually – a number that would exceed the annual cost of natural disasters and the global drug trade.² Baltimore experienced this firsthand as a cyber-attack incapacitated numerous city agencies for weeks. Universities have not been immune to these attacks either. Chinese hackers have been targeting 27 universities in the United States and around the world.³

In all these situations, victims of the attack ask the same question: what do we do now? This simple question has no simple response. For years, cyber threats were perceived to exclusively be a problem for technologists. What has become clear is that this question requires both technical and legal responses.

For years, Mark Cather has served as the Chief Information Security Officer at the University of Maryland



Cybersecurity Program Director Markus Rauschecker presents Mark Cather with his Certificate in Cybersecurity and Crisis Management. Cather graduated from Maryland Carey Law in 2019 while working full-time as the Chief Information Security Officer at UMBC.

Baltimore County (UMBC). His training and job experience have given him the expertise to prevent, detect, and neutralize cyber threats to UMBC. However, Cather realized that in order to be truly prepared for cyber assaults, the University not only had to be at the forefront of technology, but law as well. As the Chief Information Security Officer he needed to understand legal best practices, notification requirements, liabilities, and any other number of issues that inform his day-to-day work. Historically, there has been a significant divide between those working on technical issues and those working on legal issues; this separation has slowed response to cyber incidents and undermined the preparedness efforts of many

institutions. As a lawyer and a practitioner, Cather is bridging this divide, incorporating his legal training into his technical expertise.

Cather joined Maryland Carey Law as part of the evening program in 2015 while he continued to work full-time at UMBC. Over his four years at the law school, Cather not only balanced the demands of school and work, he excelled. In addition to earning his JD, Cather was able

to satisfy the requirements of the Certificate in Cybersecurity and Crisis Management. At graduation he was also honored as the recipient of the *Larry B. Shoda Award* for the most outstanding evening student. He has also been instrumental in building opportunities between UMBC and Maryland Carey Law and creating new opportunities for students to follow in his path.

Cather's academic record is exemplary, but pales in comparison to the important work that he continues to undertake at UMBC. Though we are sad he will no longer be a student in our classes, we are pleased to announce that Cather will be returning to Maryland Carey Law this winter to teach the Cybersecurity Technical Bootcamp for JD students.

¹ <https://www.whitehouse.gov/wp-content/uploads/2018/03/The-Cost-of-Malicious-Cyber-Activity-to-the-U.S.-Economy.pdf>

² http://www.circleid.com/posts/20190826_by_2021_cost_of_cybercrime_to_top_annual_natural_disasters/

³ <https://www.wsj.com/articles/chinese-hackers-target-universities-in-pursuit-of-maritime-military-secrets-11551781800>

Give to CHHS

You can support our ongoing work by contributing to the **Center for Health and Homeland Security**. Our staff has grown to more than 40 experts and professionals, many of whom present at conferences, speak at symposiums, and offer commentary in the media – all outside the scope of their normal duties. Your contribution mirrors our dedication, and your generosity will open doors to exciting new projects and provide the essential resources we need to effectively work side-by-side with emergency officials to ensure the safety of every citizen.

There are three ways to make a gift to CHHS:

- (1) Online, at mdchhs.com/give
- (2) Phone, by calling Jeanne Stringer at (410) 706-0585
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