Criminal Investigations and Network Analysis
A DHS CENTER OF EXCELLENCE

GEORGE MASON UNIVERSITY

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THOUGHTS FROM THE DIRECTOR



Jim Jones

With respect to the threat of global war in the current world, I once heard a retired US military leader say that we're not really close to war now, and we've been much closer in the past, but the world has never been as complicated, connected, and dangerous as it is now. The events of the last year, but especially the last few months, have reinforced this point with respect to the complexity and fluidity of the homeland security threat space. Consider spy balloons that most of us had not even considered until recently, mass shootings so frequent that they almost disappear in a single news cycle, multiple ongoing regional conflicts with the very real threat of miscalculation and escalation, questions about the fragility of our banking systems when the whole system relies on trust and *not* questioning its stability, and synthetic drugs which are cheap, easy to make, very concentrated and hence small, able to evade detection and maybe even laws, and don't even need to cross a border in their final form if at all.

Read more

NEWS

CINA Welcomes New Project Managers



The CINA team recently welcomed two Project Managers to support project management activities at the center.

Elizabeth Newman, brings 14 years of federal government experience working in international trade with USDA's Foreign Agricultural Service and USAID. Prior to joining

CINA, she worked at the Department of Homeland Security's (DHS) Science and Technology Directorate (S&T) within the Social Science Technology Center. In this position she covered terrorism prevention and the 5RD Countering Violent Extremism Networking R&D group.

Newman also worked with other DHS Centers of Excellence, including NCITE and START, while at S&T. Elizabeth is a Kansas native with a BA in Sociology from the University of Kansas. She obtained her MA in Psychology from The Chicago School for Professional Psychology. She also is an RPCV who served in Niger.



Jamie Lee has over 10 years of experience in project management, serving various federal and local government agencies such as FAA, TSA, and DOC as a consultant. She is a certified Project Management Professional (PMP), and her areas of expertise are focused on resource management, capture management, contract administration, and financial management to successfully deliver mission-essential functions to clients.

Prior to joining the CINA center, she worked as a Project Coordinator for Academic Administration in Provost's Office at George Mason University. She holds a B.A. in Linguistics from UCLA.

CINA Science Committee member and former FBI profiler on case of missing Massachusetts mom Ana Walshe



CINA Science Committee member and retired FBI special agent Mary Ellen O'Toole, now the Director of forensic sciences at George Mason University talks to CBS News anchors Michelle Miller and Elaine Quijano about the Ana Walshe case. The Massachusetts mother of three, has been missing since New Year's Day and her husband is facing charges for allegedly lying to investigators.

Watch the interview

David Weisburd is the first criminologist awarded Israel's Rothschild Prize in social sciences



David Weisburd, known for his innovative work in place-based criminology, experimental criminology, and white-collar crime, was recently awarded the prestigious Israeli Rothschild Prize for 2022 in social sciences. This is the first time the prize (established in 1959 and awarded every four years in social science) has been received by a criminologist.

Weisburd, Distinguished Professor of Criminology, Law and Society at George Mason University and executive director of the Center for Evidence-Based Crime Policy, also holds an appointment as the Walter E. Meyer Professor of Law and Criminal Justice in the Institute of Criminology of the Hebrew University Faculty of Law.

“The fact that I received this prize in social science and am the first criminologist to receive this honor is meaningful to me,” Weisburd said. “Criminology is a relatively new discipline, and has sometimes not been recognized sufficiently in the broader context of social science.”

Read the interview

In Arrest Of Former Top FBI Agent, Shadow Of Russian Oligarch Deripaska Looms -- Again

Louise Shelley, CINA Science Committee member and Director for the Terrorism Transnational Crime and Corruption Center (TraCCC) at George Mason University was quoted in a recent new article outlining the arrest of a former high-level FBI agent for aiding a sanctioned Russian oligarch.

Read the article



CINA’s Four 2022 MSI Summer Research Teams Awarded Follow-on Funding

Four CINA research teams sponsored by the Department of Homeland Security’s Summer Research Teams (SRT) Program for Minority Serving Institutions (MSIs) have received additional funding to continue research conducted during the 2022 summer program hosted at CINA. The MSI SRT program seeks to increase and enhance the scientific leadership at Minority Serving Institutions (MSIs) in research areas that support the mission and goals of DHS, and provides teams of faculty and students with the opportunity to collaborate and conduct research at a university-based DHS Center of Excellence.

Congratulations to the four CINA MSI partners receiving follow-on funding to extend their research in 2023:

- Dr. Omar Camarillo (Eastern New Mexico University), “The Impact of Covid-19 on Transnational Criminal Organizations: Disruption, Adaptation and Propaganda”
- Dr. Gary Kowaluk (Lincoln University), “The Patricio Transnational Criminal Organization: a Network Analysis of Forced Labor Trafficking”
- Dr. Jie Yan (Bowie State University), “A light-weighted Digital Image Forensic Analyzer to detect AI-generated fake images through Raspberry Pi”
- Dr. Boyan Kostadinov (NYC College of Technology – CUNY), “Using Modern Data Science Tools for Investigating an English Version of Chat Logs from the Conti Ransomware Group”

Learn more about the MSI SRT program

Final Report: Illicit Gold from Peru and Colombia

Check out CINA’s latest research report, which outlines findings on the illicit trade in gold from Colombia and Peru into the United States, and its links to illegal gold mining. The project, led by Dr. Camilo Pardo-Herrera (George Washington University) and Dr. Louise Shelley (GMU TraCCC), analyzed over a decade of recent bilateral trade data from three countries to reach a better understanding of the illegal gold trade and cross-border illicit pathways from Colombia and Peru, and develop methodologies which could be used to help disrupt this illegal activity across borders to the U.S. market.

The report shares analyses, recommendations, and findings on the downstream supply chain of gold, as well as its association with illicit financial flows and money laundering,

Read the final report

New Research: Commercial Sexual Exploitation and Sex Trafficking of Minors

A fact sheet outlining new research findings has been published by Jodi Quas, Psychological Science Professor of University of California Irvine and Allison Redlich, a University Professor in the Department of Criminology, Law and Society at George Mason University.

The fact sheet summarizes findings on identification and questioning of victims and prosecution of traffickers in hopes of supporting better treatment of and justice for adolescent sex trafficking victims. The findings are informed by work led by Quas and Redich through an active CINA project, “Overcoming Reluctance and Increasing Intelligence Gathering from Victims of Trafficking.”

Read the fact sheet

Project Spotlight: Digital Forensic Tools and Techniques for Investigating Control Logic Attacks in Industrial Control Systems

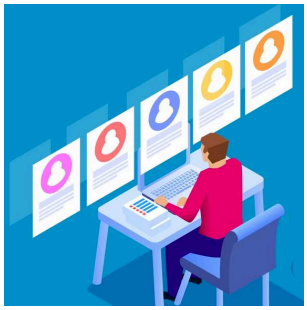
Industrial control systems (ICS) are essential for the functioning of the U.S. critical infrastructure, and protecting their integrity is of primary importance to national security, public health and safety, and the economy. While digital forensic capabilities have become more mature over recent years, those in the ICS environment are still far from being sufficiently understood, and the lack of understanding of anti-forensic attacks - which obscure an attacker's intention - significantly limits forensic analysis and prevents effective responses.

CINA researcher Dr. Irfan Ahmed (Virginia Commonwealth University) is leading an effort to investigate anti-forensic aided control logic modification attacks and develop control-logic forensic capabilities. The project will systematically improve the state-of-art in ICS forensics, and develop tools and techniques to help ICS asset owners and operators to investigate cyberattacks on industrial control systems, in order to support security and forensic capabilities that protect of a significant part of the United States' critical infrastructure.

Learn more about the project



Clearance Ready Program



The Clearance Ready Program helps Mason students prepare to obtain a security clearance, which is essential for positions that include access to national intelligence information. Many top employers of Mason students require security clearances.

Upcoming events include:

April 13: Intro to Security Clearances, 5 pm, Virtual

April 24: Psychological & Financial Well Being, 6 pm, Merten 1202

Learn more



CINA Distinguished Speaker Series with Joe Weiss - Wednesday, April 19: "Control System Cyber Security is More than Network Cyber Security"



Join us on Wednesday, April 19 for the upcoming virtual CINA Distinguished Speaker Series event featuring Joe Weiss, Managing Director at Applied Control Solutions, LLC as he discusses "Control System Cyber Security is More than Network Cyber Security."

This event will take place virtually via Zoom as well as via YouTube live stream. The information to attend virtually will be sent to participants upon registering.

Register Now

Archives - CINA Distinguished Speaker Series

In case you missed it, watch our recent Distinguished Speaker Series presentations with Joe Wheatley, Lauryn DeGreeff and Nic McKinley.

Joe Wheatley: "Working with Law Enforcement and Brands to Hold Bad Actors Accountable and Protect Consumers"



Lauryn DeGreeff: “Emerging Threats – Characterization and Detection of Homemade Explosives and Synthetic Opioids by Instrument and Canines”



Nic McKinley: “Using Transaction Data to Disrupt Illicit Commodity Markets”



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