



**2020 Deterrence and Assurance
Academic Alliance
Conference and Workshop**



March 11-12, 2020

Deterrence: Theory to Application, a Cyclone of Challenges

11 March 2020

- 0700 – 0800** Registration and Check-in / Light Breakfast & Refreshments
(Iowa State University Student Innovation Center - Atrium)
- 0800 – 0805** **Welcome Remarks:** Dean, College of Liberal Arts and Sciences, Dr. Beate Schmittmann (Basement, Auditorium)
- 0805 – 0815** **Opening Remarks:** Iowa Governor Kim Reynolds
- 0815 – 0825** **Opening Remarks:** Dean, College of Liberal Arts and Sciences, Dr. Beate Schmittmann
- 0825 – 0835** **Opening Remarks:** Rear Admiral Richard Correll, USN, Director, Plans and Policy, U.S. Strategic Command
- 0835 – 1730** **National Security Career Fair (Atrium)**
- **Agencies represented:** USSTRATCOM, CIA, FBI, ODNI, DIA, DOE, NASIC
- 0845 – 1000** **Panel Session 1**

Option 1: “Russia: Global Power or Global Bully?” (4th Floor, Room 1)

Chair: Dr. Scott Feinstein, Political Science Department, Iowa State University

Detering Russian Disinformation Operations in the Digital Age

(Turner Adams, Will Brunner, Megan Elbel, Shawn Knowlton, Ashlee McGill – University of Nebraska)

Sino – Russian Economic Cooperation

(Jenna Vigal – University of Nebraska)

Deterrence in the Danger Zone: How the U.S. can deter Russian Grayzone Conflict

(Whitney Cissell – Naval Post Graduate School)

Option 2: “The Domain Race” (4th Floor, Room 2)

Chair: Dr. Alric Rothmayer, Chair, Aerospace Engineering, Iowa State University

From Escalate to De-Escalate to A2/AD: Misperceptions of Russian Defense Policy and Implications for NATO’s Modern Deterrence and Assurance Posture
(Andrew Carroll – Columbia University)

Space Race, Are We Doomed? The Inevitability of a Space Arms Race
(Dana Hoppe, Drew Bydalek, Jordan Wong, Justin Myers, Liam Carroll – University of Nebraska)

Integration of Long-Range Multi-Domain Fires
(John Brandes – National American University)

Option 3: “Factors of Deterrence: Government and Public” (Basement, Auditorium)

Chair: Dr. Tim Wolters, History Department, Iowa State University

Global Roommates: Signing the Lease on Deterrence
(Katie Brees – University of Nebraska Omaha)

Corruption, Perceptions, and Nuclear Strategy?
(Errick Wernecke – University of Nebraska Omaha)

Using History as a Guide to Predict China’s Behavior
(Medicine Flower Blue Star – University of Nebraska Omaha)

1000 – 1015 Break

1015 – 1130 Panel Session 2

Option 1: “Threats to the Eastern Front” (4th Floor, Room 1)

Chair: Dr. James McCormick, Political Science Department, Iowa State University

The Little Sea of Great Importance: The Baltic Region as Geostrategic Crush Zone
(Rafał Kopeć, Ph.D. & Przemysław Manzur Ph.D. – Pedagogical University of Krakow)

U.S. and NATO Interests in the Rise of Turkish Nationalism
(Ryan Kovich – Iowa State University)

Russian Intervention in Eastern European State Building & its Implications for Extended Deterrence Theory
(Jacob Johnston – Iowa State University)

Prospects for Turkish-Russian Relations and Their Impact on US Deterrence Policy in the Middle East
(Patrick Baker, Andrew Neill, Lexi Robertson, Lauryn Wengert – University of Nebraska)

Option 2: “Enduring CWMD Challenges” (4th Floor, Room 2)

Chair: Mr. Marc Warburton, Director, National Security Program, University of Nebraska

A Participatory Model of Nuclear Escalation between India and Pakistan
(Marc Warbuton – University of Nebraska)

What is North Korea’s Nuclear Strategy?
(Dong-hyeon Kim – Research Fellow, Pacific Forum) **Presenting Virtually**

A Balancing Act: Prevention versus Deterrence for Combating Islamic Extremism
(Emma Mantel, Anna James, Veronica Miller, Holly Kerr – University of Nebraska)

1200 – 1330 Lunch

1200 – 1300 A Conversation about Cyber-Deterrence/Security (Basement, Auditorium)

Dr. Michael Sulmeyer, Senior Technical Advisor, U.S. Cyber Command

Ms. Elizabeth Durham-Ruiz, Director, C4 Systems, U.S. Strategic Command

Dr. Steffen Schmidt, Lucken Professor of Political Science, Iowa State University

Dr. Doug Jacobson, Director, Information Assurance Center, Iowa State University

1330 – 1500 Panel Session 3

Option 1: “Factors of Deterrence: Other Parties” (4th Floor, Room 1)

Chair: Mr. Nicholas Taylor, Defence Science and Technology Laboratory (dstl), Ministry of Defence, United Kingdom

Strategic Corrosion: Climate-Driven Threats to U.S. Force Posturing in the Indo-Pacific
(John Ellis – University of Nebraska)

Global Security: Deterrence Strategies 2020
(Alladin Dafalla – University of Northern Iowa)

A Global Necessity for CBRNE
(Zach Zippe – University of Northern Iowa)

What Are Counternarrative Strategies and How Do They Contribute to Successful Deterrence Strategies?
(Maryam Zafar – University of Nottingham, UK) **Presenting Virtually**

Option 2: “Asia Pacific Deterrence Challenges” (4th Floor, Room 2)

Chair: Dr. Michael Sulmeyer, Senior Technical Advisor, U.S. Cyber Command

Analysis of Economic Motivations for Chinese Cyber Policy
(Karina Dudley, Tyler Matson, Molly Prochaska, Russell Stout, Greg Tracey – University of Nebraska)

Measuring the Doomsday Gap: How Chinese Scholars Think AI will Affect Nuclear Deterrence with the United States
(Ryan Fedasiuk – Georgetown University)

Taking China on with Soft-Power Deterrence Strategy: an Intentional and Purposeful Approach
(Maorong Jiang – Creighton University)

Option 3 “Factors of Deterrence: Incorporating Gender into Deterrence Decision-making”
(Basement, Auditorium)

Chair: Dr. Michelle Black, Political Science Department, University of Nebraska Omaha

Abigail Garden, Graduate Student – University of Nebraska Omaha

Lana Obradovic, Ph.D. – University of Nebraska Omaha

Karen Kedrowski, Ph.D. – Iowa State University

Brooke Mitchell, Ph.D. – Congressional Nuclear Security Fellow

1500 – 1515 Break

1515 – 1615 Tour and Demonstrations Session #1 – Participants are encouraged to opt for one of these tours for each of the two sessions. Space is limited on some tours so register early.

Aerospace Tour (Space is limited, first 25 registrants only)

- **Aerospace Tour** – The Aerospace Engineering Department at Iowa State University is one of the largest undergraduate programs in the nation. This tour will overview current undergraduate educational activities, including: multi-disciplinary industry supported design /test facilities that support high altitude balloon flights, rocketry, rover design and UAV design; 6DOF neutral buoyancy tank capstone design activities; and a unique university icing tunnel used in undergraduate labs.

VRAC Tour (First session only. Limited to first 75 registrants)

- **VRAC Tour** – Guided tour through Iowa State University’s Virtual Reality Applications Center (VRAC), an interdisciplinary research center focused on the goal of enhancing productivity and creativity at all levels of the interface between humans and technology. The VRAC includes state-of-the-art technology in virtual, augmented, and mixed reality (VR/AR/MR); as well as mobile computing, developmental robotics, and haptics interaction.

Cyber Demonstration (Space is limited, 40 registrants only)

- **Cyber Demonstration** – As a National Security Agency Academic Center of Excellence, Iowa State University is one of the first universities across the nation to implement a Cyber Security Engineering degree program. This demonstration will

provide an overview of common network penetration (i.e., “hacking”) techniques as well as vulnerability exploitation for personal electronic devices such as smart phones.

Nuclear Weapons Effects (Basement, Auditorium)

- **Nuclear Weapons Effects** – Mr. Lyle Martin from the Lawrence Livermore National Laboratory will provide an overview of nuclear weapons fundamentals and effects. This unclassified discussion will include blast, thermal, and radiation effects information gained throughout the U.S. nuclear weapons testing program.

1615 – 1630 Break

1630 – 1730 Tour and Demonstrations Session #2 (see above for participant limits and descriptions)

- Aerospace Tour
- Cyber Demonstration
- Nuclear Weapons Effects

1730 National Security Career Fair Ends

1730 – 1830 Academic Alliance Members Meeting (4th Floor, Room 1)

1730 – 1830 Reception

- **Student Innovation Center – Atrium (Heavy Hors d’Oeuvres)**

1800 – 1810 Opening Remarks: Dr. Alric Rothmayer, Chair Aerospace Engineering, Iowa State University (**Basement, Auditorium**)

Opening Remarks: Joni Ernst, IA Senator (**Pre-Recorded**)

1810 – 1825 Award Ceremony: Dr. Alric Rothmayer, Chair Aerospace Engineering

1825 – 1845 Major General Clinton Crosier, Recipient Aerospace Distinguished Alumni Award

1845 – 1905 Keynote Address: Vice Admiral Michael T. Franken, USN (Ret.)

END

12 March 2020

- 0700 – 0800** Registration and Check-in / \$10.00 fee for participants Light Breakfast & Refreshments (**Iowa State University Student Innovation Center - Atrium**)
- 0800 – 0820** **Key Note Speaker:** Admiral Charles Richard, USN, Commander, U.S. Strategic Command (**Basement, Auditorium**)
- 0820 – 0830** **Academic Alliance Photo (Atrium Staircase)**
- 0830 – 0930** **Wargame Start-Ex (Basement, Auditorium):**
- Admin
 - Deterrence Overview
 - Adversary Decision Calculus/DIME Framework
 - Wargame DNI Situation Update
- 0930 – 1100** **Blue Team Breakout Sessions (5 Teams)**
- Facilitator Decision Calculus Walkthrough
 - Whole of Government Recommendation Development
- 1100 – 1200** **Blue Team COA Briefs & Discussion to NSC**
- 8 minutes per team (est.)
 - COA execution to Red Team by NSC
- 1200 – 1300** **Participant Lunch**
- Red Team Deliberation
- 1300 – 1320** **Red Team Response to Blue Team**
- 1320 – 1430** **Plenary (Open Discussion)/Closing Comments**

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