

2020 Deterrence and Assurance Academic Alliance Workshop and Conference

March 11-12, 2020

Deterrence: Theory to Application; a Cyclone of Challenges

11 March 2020

0700-0800 Transportation to Innovation Center / Registration and Check-in / Light Breakfast & Refreshments

0800 – 0805 Opening Remarks by Iowa Governor Kim Reynolds

0805 – 0810 Dean of Liberal Arts, Beate Schmittman

0810 – 0830 Rear Admiral Ryan Scholl, USN Deputy Director, Plans and Policy, U.S. Strategic Command

0830 – 1730 National Security Career Fair

0830 – 0945 Panel Session 1

Option 1: "Russia: Global Power or Global Bully?"

Chair: Scott Feinstein, Political Science, Iowa State University

Deterring Russian Disinformation Operations in the Digital Age (Turner Adams, Will Brunner, Megan Elbel, Sean 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 NPS Russia (Whitney Cissell – Naval Post Graduate School)

Option 2: "The Domain Race"

Chair: Alric Rothmayer, Chair Aerospace Engineering, Iowa State

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"

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)

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

0945 - 1000 Break

1000 – 1120 Panel Session 2

Option 1: "Threats to the Eastern Front" Chair:

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)

Option 2: "Enduring CWMD Challenges" Chair:

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)

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

- Dr. Michael Sulmeyer, Senior Technical Advisor, U.S. Cyber Command
- Elizabeth Durham-Ruiz, Director, C4 Systems, U.S. Strategic Command
- Dr. Steffen Schmidt, Lukkan Professor of Political Science, Iowa State University
- Dr. Doug Jacobsen, Chair, Information Sciences, Iowa State University

1330 – 1500 Panel Session 3

Option 1: "Factors of Deterrence: Other Parties" Chair:

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)

Option 2: "Asia Pacific Deterrence Challenges"

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 Russian and 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" Chair: Michelle Black, Ph.D. – University of Nebraska Omaha

- Abigail Garden, Graduate Student University of Nebraska Omaha
- Lana Obradovic, Ph.D. University of Nebraska Omaha (invited)
- Add Name, Ph.D. Iowa State University

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.

Aero Space Tour

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

 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

 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 – Lyle Martin, Lawrence Livermore National Labs

Nuclear Weapons Effects – Scientists 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 descriptions)

- Aero Space Tour
- VRAC Tour
- Cyber Demonstration
- Nuclear Weapons Effects Lyle Martin, Lawrence Livermore National Labs

1730 National Security Career Fair Ends

1730 - 1830 Reception

Innovation Atrium - Heavy Hors d'Oeuvres

1800 - 1805 Opening Remarks - Jonathan Wickert, Provost - Iowa State

Opening remarks: Virtual Joni Ernst, IA Senator

1820 – 1840 Award Ceremony – Jonathan Wickert, Provost Iowa State University Alric Rothmayer, Chair Aerospace Engineering

1840 – 1900 Major General Clint Crosier, Recipient Aerospace Distinguished Alumni Award

1900 – 1945 Admiral Charles Richard, STRATCOM Commander

END

12 March 2020

0700 – 0800 Transport to Innovation Center

Registration and Check-in / \$10.00 fee for participants

Light Breakfast & Refreshments

0800 – 0820 Key Note Speaker – Ret. Rear Admiral Franken

0820 – 0830 Academic Alliance Photo

0830 – 0930 Wargame Start-Ex:

- Admin
- Deterrence Overview
- Adversary Decision Calculus/DIME Framework
- Wargame DNI Situation Update

0930 – 1100 Move 1: Blue Team Breakout Sessions (5 Teams)

- Facilitator Decision Calculus Walkthrough
- Whole of Gov Recommendation Development

1100 - 1200 Blue Team COA Briefs & Discussion to NSC

- 8 mins 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

END