



2019 Nuclear Scholars Initiative Collaborative Research Topics

PONI is accepting applications for the 2019 Nuclear Scholars Initiative. Over the course of the 6-month program, Scholars are required to prepare a research product and write a blog post. The research product options include a journal article, an op-ed, a presentation or participation in a collaborative research product. A group from both the 2016 and 2017 NSI classes developed an interactive, web-based game that explores U.S. responses to possible Russian aggression on NATO's periphery. PONI will support a new collaborative research project for the 2019 class. Possible research topics include the following and research proposals seeking to examine these topics are strongly encouraged.

Emerging Technologies and Nuclear Risk

Rapidly developing technologies are transforming how both the United States and its adversaries understand and compete within the strategic operating environment. The pace of technological advancement is outstripping our ability to understand how new capabilities may undermine strategic stability or, conversely, how it may improve crisis management capacity. What technological advances might reshape the nuclear deterrence landscape or increase the possibility of nuclear crisis?

Future of Arms Control

In the current security environment of heightened power competition between the United States, Russia, China, and other states, the prospects for arms-control agreements appear bleak. At the same time, the humanitarian initiative continues to gain momentum with many non-nuclear weapon states and the UN will start negotiations on a nuclear ban treaty next year. What are the prospects for future bilateral and multilateral arms control agreements and what role should the United States and other nuclear weapon states play in reaching those accords?

Crisis Management and Escalation

Traditional formations of escalation dynamics appear inadequate for analyzing the multitude of potential nuclear escalation scenarios. The concept of the escalation ladder is insufficient when a nuclear crisis involves growing complexity and intensity between multiple actors largely focused on managing regional influence and conflict. What are different conceptualizations for understanding escalation dynamics particularly in regional crisis scenarios? How does thinking on escalation differ between nuclear armed states?