

Introduction

The 2010 Nuclear Scholars Initiative featured an outstanding class of graduate students and young professionals from across the United States as well as two graduate students from Europe. The monthly workshops that the scholars participated in from January through June covered numerous areas of nuclear policy and strategy – some of particular domestic concern to the U.S. and others more internationally focused. This year’s “nuclear spring” – including the signing of the new arms control treaty between the U.S. and Russia, the completion of the U.S. Nuclear Posture Review, the convening of world leaders for the Nuclear Security Summit, and the Non-proliferation Treaty Review Conference – provided a context that reinforced the importance of the subject matter covered in each meeting.

During the first session, the group traced the history of U.S. nuclear posture reviews and explored the thinking behind the outputs of each review. The next session was designed a survey of perspectives of states party to the Non-Proliferation Treaty and their views on the 2010 review conference. For the third session, the group turned to the issue of securing nuclear materials, with a special emphasis on the technological tools that are assisting in this effort. Next, the scholars turned to questions surrounding nuclear strategy, including the role of nuclear weapons in underwriting security commitments to states without them. In the fifth session, the group discussed the way forward in meeting key challenges for the future, namely modernizing the U.S. nuclear infrastructure, responding to the threat of nuclear terrorism, negotiating with Iran and eventually achieving global nuclear disarmament. The sixth and final meeting of the program gave the scholars an opportunity to present and discuss their original research, the results of which are contained in this year’s journal.

The papers in this year’s collection of papers, as with previous volumes, cover a diversity of issues. The first three papers deal generally with the ideas and processes contributing to the evolution of U.S. nuclear policy and its implementation. Jason Cantone assesses the impact of political rhetoric on public perception of U.S. policy and the public’s anxieties about the threat of nuclear attacks. Anine Hagemann looks at nuclear policy in the context of the U.S.’s strategic culture and sheds light on what makes “pragmatic” policy. The Nuclear Posture Reviews are, of course, at the crux of policy formulation and implementation, and Courtney Stewart considers the question of whether or not there could be benefits derived from conducting them more often.

The next set of papers are more internationally-focused and take a closer look at ways in which states can work together in a cooperative fashion to improve security. In that vein, Marcy Fowler takes up the issue of multilateralizing nuclear arms control beyond the U.S.-Russia framework, how a regime might be structured to encourage participation, and how compliance could be verified. In a closer examination of bilateral arms control between the U.S. and Russia, Anya Loukianova traces the evolution towards more cooperative approaches and increased transparency. She highlights the importance of understanding this shift to build the foundations of future arms control arrangements, namely multilateral ones. Then, shifting the focus from arms control to export control, Peter Crail takes

stock of UN Security Council Resolution 1540 and how implementation can be improved with sustained high-level attention to the issue.

While there are many security benefits to be derived from thinking long-term about the various legal and diplomatic tools that facilitate cooperation between states in meeting nonproliferation obligations and improving security, it is also important to develop prudent and effective defense strategies. To that end, the next group of articles focuses on the role of nuclear weapons in defense planning and in strategic stability. Jason Wood argues for the integration of nuclear, space and cyber defense policy into an overarching framework that would form the conceptual foundation for improved coordination and resource deployment in each domain. Tom Skypek's analysis of alternative futures for China's sea-based nuclear capabilities suggests that the Chinese are primed to significantly upgrade their submarine fleet and strike capacity. The implications of this modernization for the U.S. are indeed worthy of considerable analysis and discussion. In his paper on strategic stability between the U.S. and China, Tong Zao takes a quantitative modeling approach to draw conclusions about how decisions by each state may interact to either strengthen or undermine arms race stability. Polly Holdorf then considers the unsettling prospect that a nuclear weapon is in-fact used in a limited regional war and draws attention to the need for defense strategists and policy makers to develop plans to prevent the conflict from escalating further along a continuum from less to more use of nuclear weapons. What these papers demonstrate is that, despite the progress made towards reducing nuclear weapons and the efforts made to reaffirm the global commitment to eliminating them entirely, nuclear weapons still play a role in defense planning and are still believed to be of military value to those who have them – and potentially to those who don't. This issue brings us to the final three papers of the volume, which deal with current nuclear proliferation challenges.

Conventional wisdom holds that the U.S. cannot tolerate nuclear weapons in the hands of North Korea; however, as Nate Adler points out, the U.S. (and the rest of the world) has done exactly that. This raises questions about the relationship between rhetoric and reality, and about how states can move beyond clichéd position statements to actually manage the problem at-hand. Moreover, it is important to guard against presumptuousness thinking about what constitutes an appropriate response to a security dilemma. Sameer Lalwani takes the case of Turkey's seemingly modest efforts to counter Iran's disconcerting nuclear program and improving ballistic missile capabilities to illustrate that how threats are perceived and responded to can depend on numerous factors, not all of which apply uniformly to all stakeholders, even those that are in a formal military alliance. Nonetheless, Leah Kuchinsky seeks to account for the most salient factors in states' decisions to acquire or not acquire nuclear weapons in developing a theory that takes technological development, level of international isolation, and level of insecurity as its primary variables. While it may be impossible to develop a theory that explains political decision making perfectly, these papers, like those that precede them in the journal, offer insights that can help those in the field to think in new ways about the challenges ahead.

The Project on Nuclear Issues is deeply appreciative of the terrific work produced by the authors as well as the contributions of many others. Special thanks

are due to Anna Newby for her many outstanding efforts, which added value to every aspect of this publication and each article contained herein. We would like to recognize the other members of an extremely talented 2010 class: John Cassidy, Dan Dalton, Rob Forrest, Jenny Nielsen, Andrew Walter, Jenny Nielsen, Ryan Taugher, Andrew Walter and Heather Williams.

PONI is also grateful to Sharon Squassoni, James Tegnalia and Frank Miller, all of whom committed significant amounts of time and effort to organizing and chairing one of the monthly meetings. Linton Brooks simply cannot be thanked enough for serving as a mentor and sharing his invaluable knowledge with the group throughout the program; his involvement added tremendous value to each meeting. The success of the Nuclear Scholars Initiative depends entirely on the involvement of senior experts, so many thanks are also due to the subject matter experts who took the time to speak to the group during an extraordinarily busy year: these individuals include Steve Aoki, Hossam Aly, Elaine Bunn, Charles Ferguson, John Harvey, Laura Holgate, Randall Murch, Ken Myers, Pete Nanos, Keith Payne, Brad Roberts, Nicolas Roche, Meha Shah, Michael Wheeler and Amy Woolf.

Last but not least, we would like to thank our partners at the Defense Threat Reduction Agency for making it all possible through their consistent support of this program.

Mark Jansson
Deputy Director
Project on Nuclear Issues