2013 PPNT Boot Camp Participants



Naoko Aoki is a PhD student specializing in international security and economic policy at the University of Maryland. Her research is focused on North Korea's nuclear program. She was formerly with Kyodo News, Japan's largest news agency, covering Japanese domestic politics and economic policy in Tokyo before serving as Kyodo's Beijing correspondent from 2004 to 2009. Aoki holds an MA from The Johns Hopkins University School of Advanced International Studies (SAIS) and a BA from Sophia University in Tokyo, Japan.



Ivanka Barzashka is a research associate at the Centre for Science and Security Studies at the Department of War Studies of King's College London specialising in technical aspects of nuclear arms control and non-proliferation. Her research focuses on assessing technical options for NATO-Russia cooperation on ballistic missile defence and modelling strategic stability in a disarming world. Educated in both physics and international relations, Barzashka has managed the Federation of American Scientists' interdisciplinary assessment of Iranian nuclear capability. She has held visiting positions at the Centre for National Security and Defence Research

of the Bulgarian Academy of Sciences and the Bulgarian Ministry of Defence.



Phil Baxter is currently a PhD student in the International Affairs, Science, and Technology (IAST) Program in the Sam Nunn School of International Affairs at Georgia Tech. He completed his BA in political science and history at Grove City College and his MPP in public policy with a focus in national security policy at George Mason University. Prior to joining the Sam Nunn School, Baxter worked in international security-related positions in the Washington, D.C. area, serving as a researcher at the National Defense University on a program focused on nuclear nonproliferation and as a nonproliferation fellow at the National Nuclear Security Administration. His current research focuses on international security issues,

primarily with respect to nuclear weapons. He is particularly interested in deterrence and strategic stability in the 21st century.



Wes Boyd is a PhD student in radiochemistry at the University of Nevada, Las Vegas. He received a master of science in health physics from UNLV in May 2009 and a bachelor of science in physics with an emphasis in health physics from Idaho State University in 2005. His research interests include the analysis of nuclear weapons debris for attribution purposes and the development of synthetic weapons debris that can be used as a reference standard by radioanalytical laboratories. In addition to his PhD studies, Boyd works for the Environmental Protection Agency as a staff scientist, performing public dose assessment during radiological incidents including

the recent Fukushima Daiichi accident and providing technical support to radiologically contaminated Superfund sites.



Francesca Giovannini is the 2012-2013 MacArthur Post-Doctoral Nuclear Fellow at the Center for International Security and Cooperation (CISAC) at Stanford University. Her current research examines the role of regional powers in designing and establishing regional nuclear institutions in Southeast Asia, Europe, and Latin America. Francesca completed her DPhil at Oxford University in December 2012 in the Department of Politics and International Relations. A recipient of the prestigious Rotary World Peace Fellowship (2005-2007), Francesca studied at the University of California Berkeley, where she earned two master of arts degrees and

was subsequently appointed as lecturer in the Department of International and Area Studies for two years. She also held the position of academic coordinator of the Berkeley Summer School for the Global Generation from 2007 to 2010. After completing her bachelor's degree in political science at the University of Bologna, Giovannini served in several international peacekeeping missions, including missions with the Italian Ministry of Foreign Affairs in the Palestinian Territories, with a network of humanitarian NGOs in Turkey, and with the United Nations in Lebanon and the South Pacific.



Matthew Gratias is a provost's PhD fellow in politics and international relations at the University of Southern California. He was an intelligence analyst and cryptolinguist with the U.S. Intelligence community from 2002-2008, focusing on Iranian influence in post-2003 Iraq. His research interests include nuclear proliferation and comparative authoritarian durability. His research, co-authored with Jacques Hymans, has been published in the *Nonproliferation Review*.

Galen Jackson is a doctoral student in the Department of Political Science at the University of California, Los Angeles. He holds an MA in international relations from the University of Chicago and a BA in history and political science from Williams College. He studied Arabic at the American University in Cairo as a Bradley Fellow during the 2012-2013 academic year. His research interests include diplomatic history, qualitative methodology, and American Middle East policy. He has published an article on the United States' entry into the first world war in *Security Studies*. His current work focuses on U.S. strategy and the Arab-Israeli conflict during the Nixon and Ford administrations.



Mike Hamel is entering his third year as a PhD student in the nuclear engineering and radiological sciences at the University of Michigan. He is also working toward a graduate certificate in science technology and public policy through the Ford School of Public Policy. His research efforts involve the design of a radiation imaging system capable of combating proliferation of nuclear material by working with radiation detector arrays and system modeling through Monte Carlo methods. Other interests include how technology can be used to achieve meaningful safeguard and non-proliferation policy. In the summer of 2010, he worked as a

Department of Homeland Security intern at Savannah River National Lab. In 2012, Hamel graduated with an MSE in nuclear engineering and radiological sciences from the University of Michigan and received a BSE in nuclear engineering radiological sciences in 2011.



Susan Turner Haynes is currently a PhD candidate at George Mason University in Fairfax, Virginia. She received her master of arts from George Mason in 2010 and bachelor of science from the University of Tennessee in 2006. Haynes has published articles in two peer-reviewed journals, *Asian Perspective* and *Comparative Strategy*. She also contributed a chapter to the latest *Ashgate Research Companion to Chinese Foreign Policy*. Her research interests include Chinese foreign policy, nuclear modernization, nonproliferation, and deterrence theory.



Adam Hoffman is a PhD candidate in nuclear engineering at the University of Michigan, expecting his defense in fall 2013. His primary research interests are nuclear reactor physics and fuel cycle modeling. While his dissertation is on time-dependent neutron transport methods to support the DOE CASL project, he has also modeled and evaluated multi-tier fuel cycles for the maximization of plutonium and other actinide destruction while maintaining nuclear safety and proliferation resistance. Prior to attending graduate school, Hoffman was a general engineer at the Nuclear Regulatory Commission, where he completed the Nuclear Safety Professional Development Program (NSPDP). Hoffman participated in the Nuclear

Nonproliferation Safeguards and Security (NNSS) course at Brookhaven National Laboratory. He has an MSE in nuclear engineering from the University of Michigan and a BS in nuclear engineering from Texas A&M University.



Sonal Joshi is pursuing her doctorate in nuclear engineering and radiological sciences from the University of Michigan. Her current research into room-temperature semiconductor radiation detectors for nuclear security and nonproliferation applications focuses on coded aperture gamma-ray imaging of sources in the energy range useful for detecting special nuclear material, while discriminating from non-threatening sources. This research is funded by the DHS Domestic Nuclear Detection Office. Joshi recently completed the one-year Nonproliferation Graduate Fellowship Program at DOE NNSA in the office of Defense Nuclear Nonproliferation R&D. She has

served as president of the student chapter of the Institute of Nuclear Materials Management at the University of Michigan. Her interest in radiation detectors and instrumentation led to two summer internships at Pacific Northwest National Laboratory, where she analyzed detection technology advancements. She has earned an MSE in nuclear engineering and radiological sciences from the University of Michigan as well as an HBS in nuclear engineering from Oregon State University. She speaks Hindi and is equally comfortable with Indian and Western cultures.



Franziska J Klingberg is a PhD student in the Nuclear and Radiation Engineering Program at the University of Texas at Austin. Her dissertation is focused on the production and detection of radioxenon isotopes for Comprehensive Nuclear-Test-Ban Treaty verification. This research is conducted in collaboration with the Pacific Northwest National Laboratory. In 2009, Franziska interned at the International Data Centre of the Preparatory Commission of the Comprehensive Nuclear-Test-Ban Treaty Organization, where she discovered her interest for monitoring technologies. She then obtained her MS in physics, researching gamma-ray spectrometry for border

monitoring at the interdisciplinary Carl Friedrich von Weizsäcker-Centre for Science and Peace Research (ZNF) in Hamburg, Germany. She then worked for ZNF on atmospheric transport of radioactive noble gases. Before starting her doctoral studies in 2012 at Texas, she was a consultant for the International Atomic Energy Agency in Vienna for detecting unreported reprocessing activities.



Alex Lee is a PhD student in political science at the University of California, Irvine concentrating in international relations and democracy studies. His primary field of research is US-ROK relations, particularly regarding how democratization can influence foreign policy decision-making and how public opinion can influence foreign policy issues such as security and nuclear policy on the Korean Peninsula. For his MA in international security at Korea University, Lee studied the U.S., China, ROK, and Japan nuclear policy approaches toward North Korea. His previous research, "The Road to Strategic Alliance: Branding of US-ROK Alliance," dealt, in part, with the

impact of inconsistent nuclear policy toward North Korea and how this affected US-ROK relations and neighboring East Asian countries, and was published in the *Korea Review of International Studies*. He holds a BA in international relations from Southern Methodist University.



G. Spencer Mickum is a PhD candidate at the Georgia Institute of Technology. After graduating from Texas A&M University with a bachelor's degree in nuclear engineering, he went on to internships at Oak Ridge National Laboratory, Brookhaven National Laboratory, and two times at the Idaho National Laboratory. Mickum is currently working with Oak Ridge National Laboratory on nonproliferation and safeguards-related issues.



Amanda Moodie is a research associate in the International Organizations and Nonproliferation Program of the Center for Nonproliferation Studies (CNS) at the Monterey Institute of International Studies. In this role, she designs and implements CNS research and analysis projects on international nonproliferation organizations and regimes, and represents CNS at conferences related to non-proliferation treaties. She also serves as a lecturer to students and visiting fellows at CNS and MIIS. In addition to international organizations, her research interests include proliferation-

related norms, the role of the Non-Aligned Movement in nonproliferation efforts, and developments in the chemical and biological nonproliferation regime. Before joining CNS, Moodie worked at CSC, supporting the DTRA International Counter-proliferation Program. She has also held positions at Booz Allen Hamilton and in the Washington office of the International Institute for Strategic Studies. She holds a master of arts in law and diplomacy from the Fletcher School of Law and Diplomacy.



Evangeline Reynolds is a PhD student in political science at the University of Illinois at Urbana-Champaign. Her area of interest is international law and institutions, especially those related to arms and sensitive materials control. She is affiliated with the University of Illinois Program in Arms Control, Disarmament, and International Security (ACDIS). Before graduate school, Reynolds interned at the chemical engineering division of the Argonne National Laboratory, then worked in export controls at the U.S. Department of Commerce Chemical and Biological Controls Division of the Bureau of

Industry and Security. She graduated from Wheaton College, Illinois, majoring in chemistry and Spanish and minoring in international relations.



Patricia Schuster is a third year doctoral student in nuclear engineering at the University of California, Berkeley, focusing on radiation detection and instrumentation. She earned her bachelor's degree from the University of Michigan in nuclear engineering and radiological sciences. Her thesis work involves the physical chemistry and energy transfer mechanisms in organic crystal scintillators to understand their anisotropic response to neutrons. Previous research experience includes work in neutron imaging methods, wearable shielding designs for first responders to dirty bombs, and cross

correlation measurements to characterize fission sources. Schuster is a National Science Foundation Graduate Research Fellow and is involved in the Nuclear Science and Security Consortium (NSSC), a multi-institution research initiative led by UC Berkeley. She is interested in studies nuclear security and hopes to learn more about the policy world from her non-technical colleagues.



Clara H. Suong is a PhD student in political science at the University of California, San Diego. She specializes in international relations (security) and methodology, with a focus on security institutions and East Asia. She is interested in nuclear umbrella alliances and international and domestic politics of nuclear non-proliferation in East Asia. Other research interests include alliance politics, arms trade, foreign policy attitudes, and quantitative, experimental, and gametheoretic methods. Clara holds a BA in anthropology from Seoul National University, an MA from NYU in politics, and an MA from SUNY at Stony Brook in political science.



Ariane Tabatabai is a PhD candidate in the Department of War Studies, King's College London. Her dissertation addresses the question of the legality of the acquisition, threat, and use of nuclear weapons under Islamic law and its strategic implications, focusing on the cases of non-state actors such as Al-Qaeda, Pakistan, and Iran. Tabatabai is a Stanton Nuclear Security Fellow at the Belfer Center for Science and International Affairs, Harvard Kennedy School, and a research associate at the James Martin Center for Nonproliferation Studies. She has a BA in political science and cinema and cultural studies from the State University of New York at Stony Brook and an MA in international peace and security from King's College London.