2018 BOOT CAMP
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PARTICIPANTS

UC INSTITUTE ON GLOBAL CONFLICT & COOPERATION

PUBLIC POLICY & NUCLEAR THREATS

AARON ALLEN

Aaron ALLEN is a senior legislative assistant for a California Member of Congress who works on national security issues. He is also the founder and current president of the Foreign Affairs Congressional Staff Association. Prior to his current position, Allen had positions with the California State Senate, the Chula Vista City Council, the San Diego World Affairs Council, the International Rescue Committee, and the National Conflict Resolution Center. Born and raised in San Diego, California, Allen attended UC Berkeley and graduated in 2009 with degrees in history and political science. He has also completed coursework with Georgetown's Security Studies Program, the Harvard Law School's Program on Negotiation, the US Army War College, the Air Command and Staff College, the US Naval War College Fleet Seminar, and the United States Institute of Peace. Allen has also held fellowships with the Woodrow Wilson Center, the Partnership for a Secure America, the Council on Foreign Relations' Congressional Foreign Policy Study Group, and the Nonproliferation Policy Education Center.

MIRIAM BARNUM

Miriam BARNUM is a PhD student in political science and international relations at the University of Southern California. Her current research focuses on variation in states' attitudes toward the nonproliferation regime, as well as the relationship between nuclear proliferation and the pursuit of other weapons of mass destruction. Previously, she worked as a research assistant in the National Security Office at Los Alamos National Laboratory, and graduated with an AB in social studies from Harvard University.

MARIAH HAYS

Mariah HAYS is a master's candidate at the Fletcher School of Law and Diplomacy studying international security and nuclear studies. She previously interned with the Henry L. Stimson Center's program on South Asia, the Partnership for Global Security, and the office of Senator Maria Cantwell. These experiences brought broad exposure to regional nuclear escalation dynamics, nuclear security, and the congressional debate surrounding the Joint Comprehensive Plan of Action. She received her BA from the University of Washington's Jackson School of International Studies.

JAKE HECLA

Jake HECLA is currently a graduate student in the department of nuclear engineering at UC Berkeley. He earned an undergraduate degree in nuclear science and engineering from MIT, where he assisted in the development of a zero-knowledge protocol for weapons verification using epithermal neutrons. Currently, his research focuses on coded aperture gamma-ray imaging for safeguards applications. He is an active member of UC Berkeley's Nuclear Policy Working Group, where he is contributing to research on emerging technologies which impact strategic stability. His interests include cryptography and safeguards technology.

KIRSTEN HOWLEY

Kirsten HOWLEY is a physicist on the Lawrence Livermore National Laboratory (LLNL) planetary defense team. She derives analytic equations and leverages large-scale computing systems (supercomputers) to simulate asteroid deflection scenarios, with a focus on the effectiveness of standoff nuclear explosions to alter the speed—and thus orbital timing—of potential threats. In addition to her planetary defense work, she is involved in modeling and executing hydrodynamic experiments important to assessing the safety, security, and effectiveness of explosive devices related to national security. Howley holds a PhD and MS in astronomy and astrophysics from UC Santa Cruz, and a BA in physics and astrophysics from UC Berkeley. She joined LLNL as a graduate student summer intern in 2007, worked as a postdoc, and was hired onto the staff in 2013. She was the first of numerous staff members who got their start at LLNL as postdocs and graduate interns conducting planetary defense research.

ELSA B. KANIA

Elsa B. KANIA is an adjunct fellow with the Technology and National Security Program at the Center for a New American Security (CNAS). She focuses on Chinese defense innovation in emerging technologies in support of the Artificial Intelligence and Global Security Initiative at CNAS, where she also acts as a member of the research team for the new Task Force on Artificial Intelligence and National Security. Her research interests include Chinese military modernization, information warfare, and defense science and technology. Kania is an independent analyst, consultant, and co-founder of the China Cyber and Intelligence Studies Institute. She was also a 2018 Fulbright Specialist and is a non-resident fellow with the Australian Strategic Policy Institute's International Cyber Policy Center. Kania works in support of the China Aerospace Studies Institute through its associates program, and she is a consulting analyst with Pointe Bello and a policy advisor for the non-profit Technology for Global Security. Kania has been named an official "mad scientist" by the US Army's Training and Doctrine Command. She is a graduate of Harvard College and was a Boren Scholar in Beijing, China.

MATT KORDA

Matt KORDA works in the Arms Control, Disarmament, and WMD Non-Proliferation Center at NATO HQ in Brussels. He received his MA in international peace and security from the Department of War Studies at King's College London, where he subsequently worked as a research assistant on nuclear deterrence and strategic stability. He also completed an internship with the Verification, Training, and Information Center in London, where he focused on nuclear security and safeguards. In September, Korda will join the Federation of American Scientists as a research associate for the Nuclear Information Project. Korda's research interests and recent publications focus on nuclear deterrence, missile proliferation, gender mainstreaming, and alliance management, with regional concentrations on Russia and the Korean Peninsula.

JAMIE KWONG

Jamie KWONG will be pursuing her PhD in war studies at King's College London in the fall as a Marshall Scholar. Her research focuses on nuclear strategies and arms control, with a special emphasis on the nuclear posture revision process. She recently graduated from the University of Southern California with a BA in international relations and a master's in public diplomacy. Kwong interned at the State Department's Office of WMD Terrorism and the House Foreign Affairs Committee, and served as a Korean Studies Institute Fellow researching North Korea's nuclear weapons program.

JANINE LAMBERT

Janine LAMBERT currently works at Idaho National Laboratory with the Material Minimization, Security and International Safeguards Department. Her work focuses on mass balance for pyroprocessing fuel, testing detectors for various applications, cask change detection, and helping with the Material Protection, Accounting, and Control Technologies (MPACT) Advanced Integration Study. She also organizes courses for visitors, mainly IAEA inspectors, on subjects such as instrumentation, data collection methods, pyroprocessing, and plutonium diversion detection. She is currently pursuing more projects with international relations, development, and safeguards as well as technical cooperation. She attended the University of Michigan and obtained a BSE in nuclear engineering and radiological sciences. During this time, she interned twice at Brookhaven National Laboratory where she discovered her interest in nuclear nonproliferation and safeguards. She then pursued an MS in environmental engineering at the University of South Florida as part of the Master's International Program with the Peace Corps. To finalize her MS degree, she wrote her thesis, "A Life Cycle Assessment of a Uranium Mine in Namibia," while serving in Namibia as a math and science teacher in a small village.

GRACE LIU

Grace LIU is a research associate at the James Martin Center for Nonproliferation Studies (CNS) for the East Asia Nonproliferation Program. She produces geospatial intelligence, translates Korean and Chinese sources, and uses 3D modeling techniques to assess North Korea's WMD and ballistic missile capabilities. Her research focuses on applying open-source intelligence to verify treaty compliance. She presented on codifying the international monitoring system as a verification measure in a Korean Peninsula nuclear-weapons-free zone at the 2018 NPT Preparatory Committee and the 2018 CTBT Science Diplomacy Symposium. Liu is also an all-source military intelligence officer in the US Army. She holds a MA in nonproliferation and terrorism studies from the Middlebury Institute of International Studies, a MBA in international management, and a BA in international relations and military science from the University of New Mexico.

SYLVIA MISHRA

Sylvia MISHRA is a 2018 Herbert Scoville, Jr., Fellow, working at the Nuclear Threat Initiative's Global Nuclear Policy Program. Her research focuses on nuclear proliferation and strategy, the Nuclear Nonproliferation Treaty, South Asian security and nuclear dynamics, and emerging and disruptive technologies. Previously, she was a visiting fellow at the James Martin Center for Nonproliferation Studies, and a CSIS Nuclear Scholar Initiative Fellow. She also worked for the Observer Research Foundation's Strategic Studies Initiative and the Indian Council for Research on International Economic Relations-Wadhwani Chair in India-US Policy Studies, New Delhi on advancing India-US defense and security cooperation and US policies in the Indo-Pacific. She holds an MS in international relations from London School of Economics, a master's degree in nonproliferation and terrorism studies from Middlebury Institute of International Studies, a bachelor's degree in political science from Hindu College, University of Delhi, and a certificate for completing a course on International Safeguards Policy and Information Analysis from Lawrence Livermore National Laboratory.

CLIFTON MORTENSEN

Clifton MORTENSEN is a design physicist at Lawrence Livermore National Laboratory, where he works on physics challenges associated with the Stockpile Stewardship Program. Previously, he was a postdoctoral researcher at the lab studying insensitive high explosive. He received his PhD in aerospace engineering from UCLA.

SHAHRYAR PASANDIDEH

Shahryar PASANDIDEH is a PhD student in political science at the George Washington University. His research focuses on threat assessment, the development of military technology and its diffusion, military operations and effectiveness, and regional security issues in the Gulf region and the Indo-Pacific. He received his BA in international relations and Middle Eastern history from Trinity College at the University of Toronto.

DANIEL PUENTES

Daniel PUENTES is a second-year PhD student at Michigan State University. He performs research on experimental nuclear physics at the National Superconducting Cyclotron Laboratory with the Low Energy Beam and Ion Trap group. His research focuses on measuring one of the most fundamental properties of a radioactive particle, the mass. Understanding the mass of different radioactive particles leads to a better understanding of different nuclear astrophysical phenomena, as well as nuclear structure. Puentes earned a BS in physics and a BA in chemistry with a minor in astronomy at Florida International University. He has a strong interest in understanding the intersection between public policy and nuclear science.

VICTORIA SANCHEZ

Victoria SANCHEZ is a postdoctoral fellow with the National Nuclear Security Administration Graduate Fellowship Program. During this year she is assigned to the Office of Strategic Stability and Deterrence in the Bureau of Arms Control, Verification, and Compliance at the US Department of State. Previously, she was a nonproliferation analyst at the Pentagon for the CWMD and Proliferation Policy Division of Army Staff, and worked as a nuclear energy and nonproliferation analyst for multinational corporations and foreign governments at a boutique international consulting firm in Washington, D.C. She holds a BA and MA in international affairs from the University of Georgia, and an MA and PhD from the University of Delaware in political science and international relations. Her doctoral research focused on comparative policy change following nuclear accidents.

SELIM CAN SAZAK

Selim Can SAZAK is a PhD student in political science at Brown University. His interests include the theory and practice of nuclear deterrence, dynamics of nuclear proliferation, alliance politics, civil-military relations and security policy-making, particularly in the Middle East. Selim is also an adjunct fellow at the Century Foundation, a progressive think tank based in New York. Previously, he was a non-resident fellow at the Delma Institute, an Abu Dhabi-based think tank, and held positions at the Pugwash Conferences for Science and World Affairs and NATO Center for Excellence on Defense Against Terrorism. He received an MIA in international security policy from Columbia University.

HENRIETTA TOIVANEN

Henrietta TOIVANEN is a PhD student at the Woodrow Wilson School of Public Policy and International Affairs at Princeton University, with interdisciplinary research interests at the intersection of science, technology, and international security. Her research focuses on the dynamics of negotiations over nuclear arms control and nonproliferation agreements, specifically on how the diplomatic and technical dimensions of these negotiations interact both at the domestic and international levels. She is also more broadly interested in decision-making processes in technical security policy issues, as well as the potential contributions that novel verification technologies and other technical solutions can have in enhancing cooperation in this area. Her past professional experiences have been in Washington, D.C., Switzerland, and India, and most recently she worked at the Center for Global Security Research at Lawrence Livermore National Laboratory. She received her bachelor's degree in biophysics and international relations from Claremont McKenna College in 2017, and is originally from Kuopio, Finland.

ISABELLE WEISMAN

Isabelle WEISMAN is a graduate fellow with the National Nuclear Security Administration working in the Livermore Field Office at Lawrence Livermore National Laboratory (LLNL). At LLNL, Weisman serves as the non-proliferation and counterterrorism program engineer, and works primarily in the Nuclear and Chemical Sciences Division, applying her technical skills to Nuclear Forensics projects. Isabelle holds a MS in earth and environmental science from Vanderbilt University and a BA in geosciences from Hamilton College.

ROBERT ZEDRIC

Robert ZEDRIC is a PhD student in the Department of Nuclear Engineering at Texas A&M. Supported by a Nuclear Nonproliferation and International Safeguards fellowship, his work aims to halt the global spread of nuclear weapons by improving technologies for verification of treaties and safeguards agreements. He recently spent a year at the International Atomic Energy Agency in Vienna, Austria, and conducted research on the damaging effects of radiation on certain electronics. He is now continuing this work for his PhD, which can lead to better understanding and designs of electronics to withstand radiation environments.

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