

# Stanton Nuclear Security Fellows Seminar

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## Fellows - Alphabetically by Institution

### Jung Jae Kwon, Belfer ([jjkwon@mit.edu](mailto:jjkwon@mit.edu))



Jung Jae Kwon is a Stanton Nuclear Security Research Fellow at the Project on Managing the Atom and International Security Program at the Harvard Kennedy School's Belfer Center for Science and International Affairs. His research interests broadly include nuclear security, deterrence, and security affairs in Asia. His doctoral dissertation examines how America's non-nuclear allies contribute to deterrence and generate deterrent effects through non-nuclear means.

He is currently a PhD candidate at MIT's Department of Political Science and Security Studies Program. Prior to joining MIT, Jung Jae received his MA in Politics and International Relations from the Yenching Academy of Peking University in China. He graduated magna cum laude from Harvard University with a BA in Government. As a citizen of the Republic of Korea, Jung Jae served in the Republic of Korea Army for two years, which included a tour to the United Nations Peacekeeping Mission in South Sudan (UNMISS).

### So Jin Lee, Belfer ([sojinlee@hks.harvard.edu](mailto:sojinlee@hks.harvard.edu))



So Jin Lee is a Stanton Nuclear Security Postdoctoral Fellow at Harvard Kennedy School. She was previously a Grand Strategy, Security, and Statecraft Postdoctoral Fellow jointly appointed at the Massachusetts Institute of Technology and Harvard Kennedy School. Her research

interests include security issues in the Asia-Pacific region with a focus on the effectiveness of inducements and sanctions on mitigating the North Korean nuclear issue.

Prior to graduate school, she worked as a Researcher for the Political Section at the Embassy of the Republic of Korea in Washington, D.C. She holds a Ph.D. and M.A. in Political Science from Duke University, an M.A. in Asian Studies from Georgetown University's Edmund A. Walsh School of Foreign Service, and a B.A. in Politics from Mount Holyoke College.

**Anne Stickells, CEIP ([Anne.Stickells@ceip.org](mailto:Anne.Stickells@ceip.org))**



Anne Stickells is a Stanton pre-doctoral fellow at the Carnegie Endowment for International Peace in Washington D.C. She is a PhD candidate in Security Studies at Princeton University's School of Public and International Affairs. Her work focuses on the incorporation of emerging technologies into U.S. nuclear weapons infrastructure, and their ultimate impact on U.S. nuclear strategy. In particular, she examines how factors such as bureaucratic and organizational pressures complicate the relationship between technology and nuclear strategy.

Prior to her time at Princeton, Anne worked at RAND as a research assistant in Santa Monica. Her projects varied, ranging from an analysis on the proliferation of remotely piloted aircraft to an assessment of the impact of social bots on extremism. However, many of her projects were related to U.S. nuclear modernization efforts. She holds an M.A. in Security Studies from Princeton and graduated from Stanford University with a B.A. in Science, Technology, and Society, and a minor in Creative Writing.

**Justin Canfil, CFR ([j.canfil@columbia.edu](mailto:j.canfil@columbia.edu))**



Justin K. Canfil is a Stanton Nuclear Security Fellow at the Council on Foreign Relations (CFR), where he is focusing on the relationship between arms control, legal maneuverability, and technological change. From 2024, he will be in residence at CFR, and on leave from his present position as an Assistant Professor of International Relations at Carnegie Mellon University. Prior

to Carnegie Mellon, Dr. Canfil held concurrent postdoctoral fellowships with the Belfer Center for Science and International Affairs at the Harvard Kennedy School and the Columbia-Harvard China and the World Program. He also received a Fulbright Scholarship to China. After the fellowship, he will be a visiting research associate at Princeton's Center on Contemporary China. He received a PhD from Columbia University, with a specialization in international law via Columbia Law School.

**Leyatt Betre, CISAC ([leyatt@stanford.edu](mailto:leyatt@stanford.edu))**



Leyatt Betre is a postdoctoral fellow at Stanford University's Center for International Security and Cooperation. Her research interests include the history and politics of U.S. military R&D, the Non-Aligned Movement, and the reorganization of global industrial capacity since the 1970s.

She holds a Ph.D. in Public and International Affairs from Princeton University. Her dissertation, "The Production of Arms and Influence: Weapons, Diplomacy, and the Technopolitics of Nuclear Strategy," traces the historical origins of strategic narratives commonly associated with nuclear weapons systems by examining the technical communities responsible for designing and developing them. Prior to entering graduate school, Leyatt received her SB degree in Physics and Political Science from the Massachusetts Institute of Technology, where she conducted research in both the Security Studies Program and the Kavli Institute for Astrophysics and Space Research.

**Caleb Pomeroy, CISAC ([pomeroy.38@buckeyemail.osu.edu](mailto:pomeroy.38@buckeyemail.osu.edu))**



Caleb Pomeroy is a Stanton Nuclear Security Fellow at Stanford University's Center for International Security and Cooperation. He researches the psychology of power in international relations, notably the effects of relative state power on human thought and behavior. This

research received the honorable mention for the 2023 Waltz Award for best dissertation from APSA's International Security Section.

He was previously the Diana Davis Spencer Postdoctoral Fellow in US Foreign Policy and International Security at Dartmouth College's Dickey Center. His work is published or forthcoming at *International Organization*, *International Studies Quarterly*, *Journal of Peace Research*, and *Security Studies*, among other outlets. He holds a PhD in International Relations from The Ohio State University, an MSc in Contemporary Chinese Studies from the University of Oxford, an MSc in Security Studies from University College London, and a BA in Economics from Boston College.

### **Barbara Cruvinel Santiago, CISAC ([barbara.santiago@columbia.edu](mailto:barbara.santiago@columbia.edu))**



Dr. Bárbara Cruvinel Santiago is a Stanton Nuclear Security Fellow at the Stanford Center for International Security and Cooperation (CISAC). She got her physics Ph.D. at Columbia University working on astronomical instrumentation under a NASA FINESST fellowship. Born and raised in Brazil, she got her B.S. in physics at Yale University, after which she worked at MIT's Nobel-Prize-winning LIGO lab and got her master's at Columbia. She was one of the inaugural fellows of the Next-Generation Fellowship from the Physicists Coalition for Nuclear Threat Reduction, and received the 2021 American Physical Society 5 Sigma Physicist Award for congressional advocacy in nuclear disarmament.

Before starting her post-doc, Bárbara did research in a variety of fields, from particle and atomic physics to quantum optics and astronomical instrumentation. Her CISAC post-doc research, however, focuses on how to identify dual-purpose research developed by academics/civilians but of military interest, especially in the physical sciences, as a mean to help on nuclear non-proliferation and nuclear threat reduction initiatives by preventing the weaponization of science.

### **Jake Hecla, MIT NSE ([jakehecla@gmail.com](mailto:jakehecla@gmail.com))**



Jake Hecla is a Stanton Fellow at the Massachusetts Institute of Technology in the Laboratory for Nuclear Security and Policy. His research interests focus on emerging technologies, including nuclear thermal propulsion, micro-reactors, and advanced radiation detection techniques.

As a PhD candidate, he worked with the Rare Event Detection group at Lawrence Livermore National Laboratory, where he developed diagnostics tools for antineutrino detectors. From 2017-20, he worked with Lawrence Berkeley National Laboratory developing algorithms for coded aperture image reconstruction. In 2018, he led a project to use LBL's "scene data fusion" radiation detection and mapping system to perform detailed mapping of the radiation environment in the Chernobyl Exclusion Zone and portions of the New Safe Confinement structure.

Hecla holds a PhD and MS in nuclear engineering from the University of California, Berkeley and a BS in nuclear science and engineering from MIT.

### **Sarah Bidgood, MIT SSP ([sbidgood@mit.edu](mailto:sbidgood@mit.edu))**



Sarah Bidgood is a Stanton Nuclear Security Fellow in the MIT Security Studies Program. Prior to this, she served as Director of the Eurasia Nonproliferation Program at the James Martin Center for Nonproliferation Studies in Monterey, California. Her work focuses on U.S.-Soviet and U.S.-Russian arms control, risk reduction, and nonproliferation cooperation, as well as the nonproliferation regime more broadly. Her research and analysis have been published as single- and coauthored articles in journals such as *International Security*, the *Journal for Peace and Nuclear Disarmament*, and *The Nonproliferation Review*, as well as outlets including *Foreign Policy*, *Arms Control Today*, *War on the Rocks*, and *The National Interest*. Sarah is a coauthor of

the forthcoming book, *Death Dust: The Rise, Decline, and Future of Radiological Weapons Programs*, which will be published by Stanford University Press in December 2023. She is also the coeditor of *Once and Future Partners: The United States, Russia, and Nuclear Non-proliferation* (London, UK: International Institute for Strategic Studies, 2018).

Sarah received her BA in Russian from Wellesley College. She holds an MA in Russian, East European, and Eurasian Studies from the University of North Carolina-Chapel Hill and an MA with distinction in Nonproliferation and Terrorism Studies from the Monterey Institute of International Studies. She is a PhD candidate in Defense Studies at King's College London, where her dissertation focuses on the relationship between Cold War nuclear crises and arms control.

**Thomas Fraise, MIT SSP ([thomas.fraise@sciencespo.fr](mailto:thomas.fraise@sciencespo.fr))**



Thomas Fraise is a Stanton Nuclear Security Fellow in the MIT Security Studies Program. He is also an affiliate researcher with the Ritual Deterrence project at the University of Copenhagen (Denmark). His work focuses on the relation between nuclear weapons and democracy, nuclear secrecy, and nuclear deterrence in Europe during the Cold war. His research has been published in the *European Journal of International Security* and the *Bulletin of Atomic Scientists*. He holds a Ph.D from Sciences Po (Paris, France), where his dissertation focused on nuclear secrecy and democracy in France, the UK and Sweden, and received a bachelor in Law from the Université d'Auvergne (Clermont-Ferrand, France).

**James Kim, MIT SSP ([jamesdkim@tamu.edu](mailto:jamesdkim@tamu.edu))**



James D. Kim is a Stanton Nuclear Security Fellow at Massachusetts Institute of Technology's Security Studies Program. His research interests include nuclear security, political violence, and armed conflict, with a particular emphasis on examining how exposure to armed conflict influences preferences for nuclear proliferation. His academic research has been published in the *Journal of Conflict Resolution* and *International Studies Quarterly*, and he has written a policy commentary for *NK News*.

He holds a Ph.D. in political science from Texas A&M University, an M.A. in international relations from Tsinghua University in Beijing, China, and a B.A. in political science and international affairs from Yonsei University in Seoul, South Korea.

**Simon Adu, Texas A&M ([adusimon2003@gmail.com](mailto:adusimon2003@gmail.com))**



Simon Adu is a 2023 – 2024 Stanton Nuclear Security Fellow at the Center of Nuclear Security Science and Policy Initiatives at Texas A&M University. Dr. Adu research interest are nuclear security, non-proliferation, and nuclear safety. His research focus on addressing nuclear security and nonproliferation concerns in the introduction of small modular reactors (SMRs) in African countries. He holds Ph.D., MPhil in Radiation Protection from University of Ghana, and BSc in Physics from University of Cape Coast.