

# PARTICIPANTS

## Julian Atencio Security Program Manager

Julian Atencio is a Security Program Manager for the Los Alamos National Laboratory (LANL). He has managed several different security programs during the last 19 years including Personnel Security, Human Reliability, Clearance Processing, Badge Office, Incidents of Security Concern and Deployed Security. He is currently serving as the Program Manager for the Department of Energy's pilot Counter Unmanned Aircraft System (CUAS) Program. Julian works with the National Nuclear Security Administration's (NNSA) Office of International Nuclear Security (INS) to collaborate with country partners on Nuclear Security Culture, Insider Threat Mitigation, Behavioral Observation Programs, Substance Abuse and emerging UAS threats. His interests include security prudence, security of influence and the clash between free will and aberrant behavior in the setting of trustworthiness programs. Prior to joining the Los Alamos National Laboratory, Julian worked at a medical examiner's laboratory and a criminalistics laboratory in the field of Forensic Science.



## **Chloë Barker** Ph.D. Candidate

Chloë Barker is a second year Ph.D. Candidate at Newcastle University, in the field of non-proliferation and nuclear deterrence, foregrounded in the operations of ground based ballistic missile early warning (BMEWS) sensor RAF Fylingdales UK. Chloë's research addresses the operational geographies of deterrence, early warning, and space surveillance, through analysis of micro (human) and macro (technological) interactions which take place every day at RAF Fylingdales. Applying a post-structuralist framework to explore these hidden embodied interactions, making tangible for analysis embodied and tacit interaction between technologies and human experience. This work extends Chloë's innovative application of creative and embodied methods previously as coinvestigator on United Kingdom Research Innovation project, Turning Fylingdales inside out (2020-2023) conducted through a collaboration with UK Space Command. Chloë's interests span geopolitics, astropolitics, technology, women peace and security, post-qualitative methods, creativity, critical military studies, post-human feminism. Her work includes engagements with policy and thought leadership in space and nuclear securities through memberships of British International Studie Association's Astropolitics Working Group and N Square Advisor Network (2020-2022), seeking to build greater public and decision maker awareness in space and nuclear securities.



## Elyse Boldt

## Ph.D. Candidate

Elyse Boldt is a PhD student in international relations at Yale. Her research focuses on great power politics, nuclear security, and international relations theory. Currently, she is writing a dissertation that seeks to explain variations in periods of detente between historical adversaries. She received her B.A. in political science from the University of Notre Dame.



## **Dominic Brennan** Ph.D. Candidate

Dominic Brennan is a Ph.D. student at Cambridge University researching the development of fair automated decisionmaking tools used in nuclear power design. This research focuses on identifying and recovering from the errors caused by optimising a misrepresentative system, branching the concepts of procedural fairness and computational system optimisation. As case study, he optimises the design of plutonium-based fuels for their economics, nuclear safety, and nuclear security, and investigate how optimising a misrepresentation of this system can lead to nuclear safety or security breaches. Whilst finishing up his Ph.D., Dominic is working as technical adviser within the Department of Energy Security and Net Zero in the UK Government.



#### Ilenia Bruseghello Master's Student

Ilenia Bruseghello is a former cadet of the Italian Navy with three years of experience in the military field. She holds a Bachelor's Degree in Political Science and International Relations from Sapienza University of Rome, and she is currently pursuing an Erasmus Mundus International Master's Degree in Security, Intelligence and Strategic Studies, jointly awarded by the University of Glasgow, Dublin City University and Charles University in Prague. She is a NATO Public Diplomacy Division Grantee with experience in project management and policy development. Ilenia's main areas of research encompass emerging technologies, space security, and nuclear proliferation issues. Ilenia is also an IAEA Marie Skłodowska-Curie Fellow. She has been a Nuclear Risk Research Fellow at the Existential Risk Alliance, and she is currently researching proliferation issues in outer space. She is part of many youth networks engaged in nuclear issues, such as the CTBTO Youth Working Group and the Emerging Voices Network at BASIC.



#### Joel Castillo Ph.D. Candidate

Joel Castillo is a 5th year graduate student in the PhD Radiochemistry program at UNLV. His expected graduation is December 2024. His current research is in the areas of solvent extraction and organometallic chemistry— specifically investigating the speciation of actinide metals extracted from acidic media with organophosphorus and/or diglycolamide extractants. He has joined the PPNT Bootcamp to supplement his studies in radiochemistry and to become better acquainted with the "other" side of our nuclear program that enables all of this work to even happen in the first place. Participation in this bootcamp will help to better understand relevant issues such as and nuclear deterrence and non-proliferation.



#### **Elodia Ciprian** Ph.D. Candidate

Elodia is a PhD candidate and Fuel Cycle Science Fellow at the University of Notre Dame, working in the Actinide Research Laboratory and advised by Dr. Amy Hixon. Her work involves a multi-lab venture with Savannah River National Laboratory and Oak Ridge National Laboratory, where she conducts research focused on the chemical and physical characterization of plutonium compounds with applications to the nuclear fuel cycle, nonproliferation, and safeguards. During her graduate studies, she has participated in previous nuclear-related policy courses and was awarded a summer internship in 2023 with the Lawrence Livermore National Laboratory (LLNL) Glenn T. Seaborg Institute. During her 10 weeks at LLNL, she studied the synthesis and characterization of doped uranium compounds with broader applications to intentional nuclear forensics. Elodia holds a Bachelor of Science in Environmental Geology from California State University San Bernardino.



#### Brian Cook

#### Policy Research Analyst

Brian Cook is a Policy Research Analyst at Los Alamos National Laboratory's Center for National Security and International Studies where he conducts research on strategic competition, nuclear deterrence, emerging technologies, and climate change. He started his time at the lab as a graduate intern and a participant of the NSSC-LANL Keepin Nonproliferation Science Summer Program. Brian also has experience in the private sector working as an analyst and account manager in the field of digital advertising technology. His current interests revolve around the nexus of national security, geopolitics, and technology. He holds a Master's degree in International Security Studies from the University of Arizona and a B.A. in International Affairs from the University of Colorado, Boulder.



## Nico Daiyega Postdoctoral Fellow

Dr. Nico Daiyega is a postdoctoral fellow in the Strategic Security Sciences Division of Argonne National Laboratory. His expertise includes nuclear physics, nuclear engineering, nuclear decontamination and remediation, nuclear weapons, arms control, and security. Dr. Daiyega developed and created his own sensors for studying particle resuspension and developed the first field experiments for studying particle resuspension in over 30 years. He is involved in multi-million-dollar, multiagency, international field experiments to study particle resuspension and stabilization of radioactive particles. His research led to the creation of guidelines for emergency phase, mechanical resuspension in nuclear events such as nuclear power plant meltdowns, Radiation Dispersal Devices (RDDs), and improvised nuclear devices (INDs). Dr. Daiyega has also taught in courses at University of Illinois Urbana-Champaign that detail the physics of nuclear weapons and their effects, as well as delivery systems and defenses against nuclear attacks. These courses also present current events and past issues in arms control and teach students technical writing for public policy. Dr. Daiyega has been an advocate of Diversity, Equity and Inclusion since his undergraduate studies. At Argonne National Laboratory, Dr. Daiyega currently serves as the Vice President of the Hispanic/Latino Club (HLC) Employee Resource Group (ERG) and volunteers his time helping the Nuclear Technologies and National Security (NTNS) Diversity, Equity, Inclusion & Accessibility (DEIA) Council.



## Karla Erickson Actinide Chemist

Karla A. Erickson, Ph. D., is an actinide chemist who joined Los Alamos National Laboratory in 2015 as a Glen T. Seaborg Postdoctoral Fellow and became a staff scientist member of the Chemistry Division in 2018. Dr. Erickson uses her chemical expertise to support and lead projects throughout the laboratory including Weapons Surveillance Programs, the Molten Salt Reactor Campaign, Nonproliferation R&D, and fundamental actinide science. In 2023, she launched the Plutonium Science (PluS) Laboratory which has a mission to steward the fundamental plutonium science that underpins nonproliferation and supports an agile response to emergent needs. Dr. Erickson has won several awards including two Spot Awards, the Patricia E. Gallagher Pollution Prevention Award (Gold level, 2021) and a Research award from the American Institute of Chemists (2016). She is an author of over 18 peerreviewed publications and is a co-inventor of a patent. She is a member of the 2024 LANL MEDAL (Mid to Early career Deterdetect-prevent Advanced Leadership) cohort..



#### Andrew Fishberg Ph.D. Candidate

Andrew Fishberg is a PhD student at MIT studying robotics, computer science, and AI. His research focuses on the development of multi-agent mapping algorithms in service of nuclear non-proliferation. Prior to his graduate work, Andrew received a CS degree from Harvey Mudd College and worked full-time as an Associate Staff member in MIT Lincoln Laboratory's Advanced Capabilities and Systems Group. Beyond robotics, Andrew has interest in policy, education, and AI / technology ethics.



## Camille Freestone International Security Analyst

Camille Freestone is an international security analyst focused on radiological security at Lawrence Livermore National Laboratory. She worked previously as a researcher on national security topics and prior to that served in international humanitarian aid. She has a master's degree from the Fletcher School of Law and Diplomacy at Tufts University.



## Faith Gay Master's Student

Faith Gay is a progressive foreign policy advocate who works with policymakers, organizations, and activists to build more peaceful, just, and diplomatic policies. With experience working on issues ranging from cutting Pentagon spending to nuclear abolition, her work is centered on emphasizing the human costs of war, and what we owe to those harmed. She's been most recently published in Inkstick, writing on the human and environmental costs of nuclear weapons. She's also contributed as a speaker to faith community conversations on the threat of militarism to climate change mitigation, as well as a TikTok series on the U.S. military funding process. Currently, she serves on the field-building advisory committee for the Ploughshares Fund, a nonproliferation philanthropy organization. Ultimately, Faith envisions a world where the most vulnerable communities are at the center of U.S. foreign policy decision making, and their needs are prioritized over profit and power. She holds a B.A. in international studies from American University in Washington D.C. and is an incoming graduate student in Princeton University's Master in Public Affairs program.



#### **Isaac Haynes** Ph.D. Candidate

Isaac was a 2020 graduate of the University of Tennessee, where he double-majored in Chemistry and German. After graduation, he began working on his Ph.D. in chemistry by joining the Charles M. Folden III research group for nuclear forensics at Texas A&M. His Ph.D. project looks at expanding current nuclear forensics and nuclear nonproliferation techniques to new areas, with a goal of reducing the threat of nuclear terrorism and nuclear material proliferation. When not in the lab, you can usually find Isaac at home with his wife Taylor, their dog Oli, and their cat Lula.



## Tanner Heatherly Master's Student

Tanner Heatherly is an M.S. nuclear engineering student at Oregon State University (OSU) with a B.S. in nuclear engineering from the same institution. His current work involves generating synthetic gamma spectroscopy data for integrating machine learning information barriers with passive gamma attribute measurements as part of the NNSA's PROACTIVE arms control venture. Prior to this, Tanner interned with Los Alamos National Laboratory's (LANL) Nuclear Engineering and Nonproliferation: Advanced Nuclear Technology (NEN-2) division where he participated in COMET critical assembly setup and operation in the Device Assembly Facility at the Nevada National Security Site. Outside his academic work, he is an active member of his local American Nuclear Society and Institute of Nuclear Materials Management chapters at OSU.



#### **Emma Houston** Ph.D. Candidate

Emma Houston is a graduate student at the University of Tennessee pursuing a Ph.D. in Nuclear Engineering. She is a Nuclear Nonproliferation and International Safeguards fellow where she studies international safeguards for advanced reactors. She received her bachelors from the University of Tennessee's Nuclear Engineering Department in 2022. Emma is passionate about nuclear nonproliferation, international safeguards, and the technical and policy challenges associated with both. She currently serves as the 2024 Nuclear Engineering Student Delegation (NESD) chair.



## Sangcheol Hyung Principal Researcher

Sangcheol Hyung is a Principal Researcher at the Korea Institute of Nuclear Nonproliferation and Control (KINAC), a specialized nuclear control agency in Korea and in charge of policy affairs such as laws and regulations related to physical protection and safety measures.



## **Brittany Iriart** Counterintelligence Officer

Brittany Iriart is a counterintelligence officer at the Los Alamos National Laboratory. She has an extensive background in global intelligence and high-level security. Notably, Brittany served as a special agent in the U.S. Department of State's Diplomatic Security Service where she specialized in East Asian and Pacific Affairs. She is passionate about nuclear non-proliferation and global diplomacy.



#### Sergiy Kuchko Master's Student

Sergiy Kuchko is a graduate student at the Harris School of Public Policy at the University of Chicago, actively engaged in the Nuclear Security research group within the Existential Risks Laboratory. His research focuses on nuclear terrorism and nuclear disarmament strategies. With aspirations to alleviate nuclear security risks, Sergiy plans to pursue a PhD in political science, focusing on the nuclear security research. Prior to his graduate studies, Sergiy was a successful business leader and entrepreneur, managing an international business company. He is married and has two children.



#### Hadar Lazar Scientist

As a scientist dedicated to research and development in nuclear monitoring, Hadar feels responsible for learning about the broader picture behind her work. She developed an expertise in high energy radiation detection as a physics PhD candidate at the University of California, Berkeley, with a specialization in space sciences. When she joined the Sandia National Laboratories, she sought to contribute to early-stage designs of different radiation detection systems, with a focus on applications in treaty verification and transparent nuclear monitoring. She is proud of U.S. technology and believe in its ability to meet the ends defined by previous nonproliferation treaties. Simultaneously, she remains conscious of public policy's evolving nature and the pressing need for global stabilization. She is excited to join the PPNT bootcamp to learn more about our policies and build a network committed to these missions.



#### **Daeyeon Lee**

#### Master's Student and Research Associate

Daeyeon Lee is a Research Associate at the Center for Global Security Research (CGSR) within the Lawrence Livermore National Laboratory (LLNL). His research explores nuclear security and the politics of the Korean Peninsula, concentrating on formulating balanced strategies for North Korea's nuclear disarmament with deterrence and engagement. Daeyeon earned his BA and MA in International Relations at San Francisco State University. For his MA thesis, he assessed and analyzed South Korea's foreign policies towards North Korea, focusing on Presidential speeches. Currently, he is advancing these studies toward an MA in Nonproliferation and Terrorism Studies at the Middlebury Institute of International Studies, concentrating on US strategies toward North Korea's nuclear program.



#### **Yitong Lin** Master's Student

Yitong is an MSc student in International Political Economy at the London School of Economics (LSE). She holds a Master's degree in International Security, Diplomacy and European studies, and a Bachelor's in political science, both from SciencesPo Paris. She has global experience in research, advocacy, and stakeholder engagement across the UN, think tanks, and NGOs spanning 7 countries. Her most recent work includes political and legal research, report drafting, and diplomatic liaisons at the UN Office in Disarmament Affairs in Geneva, and UN Women in New York. She also worked as a research& advocacy assistant at the International Crisis Group, analysing the EU, U.S., and China's strategies regarding conflict prevention and resolution. Dedicated to gender equality and youth engagement, she was selected to present her work at the 2023 EU Non-Proliferation and Disarmament Conference -NextGen workshop. Yitong speaks fluent Chinese, English, French, and Cantonese.



#### Mahek Logantha Ph.D. Candidate

Mahek is a PhD student in the Nuclear Engineering Department at the University of California, Berkeley. She works at the Berkeley Lab Laser Accelerator Center at Lawrence Berkeley National Laboratory where her group focuses on building the next generation laser driver for laser plasma accelerators. The high power, ultrashort laser pulses at high repetition rates will enable applications in science, industry, security, and medicine. Along with her technical work, Mahek is interested in the implications and intersection of evolving technologies and nuclear policy. Prior to this, Mahek earned her B.S. in Mechanical Engineering at the University of California, Irvine.



## Zachary McGuire Ph.D. Candidate

Zachary McGuire is a third year Ph.D. student in nuclear engineering at UC Berkeley. He earned his M.Eng. in the same field from UC Berkeley in 2021 and his B.S. in Applied Physics from Rensselaer Polytechnic Institute in 2018. Zachary works with the Bay Area Neutron Group under Dr. Bethany Goldblum characterizing scintillators. In his spare time, Zachary plays tenor drums with the University of California Marching Band – Go Bears!



#### **Ester Molinaroli** Master's Student

Ester Molinaroli is a master's student in International Security at Sciences Po Paris. Her studies have focused on defense strategy, proliferation issues, and international mediation, publishing an article on the Joint Comprehensive Plan of Action about the politics surrounding Iran's nuclear activities. She has worked at the OECD Nuclear Energy Agency on radioactive waste management and decommissioning, conducting research and policy analysis. Through her work, she delved into the security challenges related to the back end of the nuclear fuel cycle, participating in international discussions for safety regulations. She holds a bachelor's degree in political science with a focus on transatlantic relations.



## Kaitlin Peach Ph.D. Candidate

Kaitlin Peach is a current PhD Candidate in Political Science at the University of Oklahoma. Her dissertation research focuses on the US public's nuclear war risk perceptions and how risk perceptions shape an individual's nuclear weapons and deterrence policy preferences. She is a Graduate Research Assistant at the Institute for Public Policy Research and Analysis (IPPRA) where she works on projects related to public opinion on national security as well as on an IPPRA-Sandia National Laboratories related nuclear weapons program management. She holds a BA and MA in International and Area Studies with a concentration in Security Studies from the University of Oklahoma.



## Stephanie Plant Technical Project Manager

Stephanie Plant is a Technical Project Manager at Los Alamos National Laboratory, where she supports the Department of Energy's Nuclear Smuggling Detection and Deterrence program. Her work addresses the challenges and opportunities in implementing counter nuclear smuggling systems to detect material out of regulatory control. Her current portfolio is focused on projects in the Middle East and Central Asia. Stephanie completed an A.M. in Russian, Eastern European, and Central Asian Studies at Harvard University in 2011 and a B.A. in Journalism at the University of Minnesota in 2009. She looks forward to learning and discussing strategies for combating modern nuclear threats at the 2024 PPNT Bootcamp.



#### **Abrianna Rhodes** Ph.D. Candidate

Abrianna Rhodes is a first-year PhD Student in Political Science at Stanford University. Her research interests include nuclear crisis and escalation dynamics, the role of the information environment in nuclear signaling, and the nuanced framing of nuclear issues. Prior to joining Stanford, Abrianna worked as a research assistant at the Carnegie Endowment for International Peace, focusing on issues related to the information environment. She received her B.A. in political science from Vanderbilt University, where her research centered on the framing of nuclear declaratory policies.



## Leslie Sherrill Deputy Division Leader

Leslie Sherrill is the Deputy Division Leader for Los Alamos National Laboratory's X Theoretical Design (XTD) Division, which is responsible for the design and assessment of nuclear weapons. Leslie previously spent several years as Group Leader for Integrated Design and Assessments and Deputy Group Leader for Primary Physics. She came to Los Alamos as a Postdoc in 2006 after completing her Ph.D. in Physics at the University of Nevada, Reno in the field of spectroscopic characterization of plasma conditions in Inertial Confinement Fusion experiments. In her time at Los Alamos, she has designed and analyzed high energy density physics experiments, has worked on validating new modeling capabilities in multi-physics codes, has served as a Point of Contact for a weapon system, and has been a Project Leader for two Verification and Validation projects. From 2020-2021, Leslie was the Los Alamos representative for the DOE Oppenheimer Science and Energy Leadership Program, and in 2023 she was part of the inaugural cohort for the LANL Executive Leadership Development Program.



#### Tarek Alexander Sorg Postdoctoral Researcher

Alexander Sorg is a postdoctoral researcher at Sciences Po and a research fellow at the Hertie School's Centre for International Security. His research interests include nuclear weapons, surveys, and citizens' willingness to fight. He has published in International Studies Quarterly, NATO Defense College Research Papers, and contributed opinion pieces to War on the Rocks as well as various German and Dutch newspapers.



## Kyungwon Suh Lecturer

Kyungwon Suh is a Lecturer at the Strategic and Defence Studies Centre at the Australian National University. He received a Ph.D. in Political Science from Syracuse University in 2022. His research interests include nuclear weapons, interstate coercion, alliance politics, and great power politics. Kyungwon's research has been published in Journal of Peace Research and Journal of Conflict Resolution.



## **Erica Sullivan** Deputy Group Leader

Erica Sullivan is the deputy group leader (DGL) for the Technology Applications (A-3) group at Los Alamos National Laboratory (LANL). A-3 combines cutting edge research with agile engineering methods to deliver and deploy system-level solutions to end users across the US Government. Erica has been in the DGL role for 2 years. In addition to supporting the group as a manager, Erica is the project manager for a diverse set of efforts within A-3. Erica has been at LANL since 2002: she arrived, like so many LANL staff, as a summer student intending to stay a few months, and never left. Erica spent the first 9 years of her career in business development and licensing at the Technology Transfer Division. In 2011, she accepted a Technical Project Manager position in LANL's Global Security Directorate, where she began working on small, agile space system development efforts. Erica became the program manager in 2015 for the growing Agile Space Program, which delivered over 20 experimental small satellites to orbit. Erica leveraged the agile engineering techniques developed for space to create a broader Agile Response Program, which delivered space, air, and ground solutions for Department of Defense partners. In 2022, Erica accepted the DGL position in A-3, in which she continues to support the delivery of novel systems by enabling A-3 staff to execute a wide range of multi-disciplinary research and engineering efforts. Erica holds bachelor's degrees in biology and economics from Loyola Marymount University, and an MBA from San Diego State University. She received her Project Management Professional credential in 2014.



## **Chelsey Wiley** Research Analyst

Chelsey is a research analyst in the Strategy, Technology and Arms Control programme at the International Institute for Strategic Studies (IISS) in Washington, DC. Before joining the Institute, Chelsey was a Research Assistant for the Proliferation and Nuclear Policy programme at the Royal United Services Institute. She holds an MSc in Security Studies from University College London and a BA in International Relations from Franklin University Switzerland.



## Raven Witherspoon Predoctoral Fellow

Raven Witherspoon is a predoctoral fellow at Princeton's Program on Science and Global Security. She received her master's degree in global affairs from Tsinghua University, Beijing, where her thesis explored U.S.-China nuclear risk reduction. She continued her language studies in China as a Blakemore-Freeman language fellow and became a Young Ambassador for the Carnegie Endowment for International Peace and an African-American China Leadership Fellow at the American Mandarin Society. Raven is a former nonproliferation and national security intern at Brookhaven National Laboratory and health physics intern at Surry Nuclear Power Station. She has served as a Legislative Aide for a Delegate in Virginia's General Assembly, and as a Student Organizing Fellow of the Poor People's Campaign. Raven holds an undergraduate degree in physics with minors in mathematics, political science, and international social justice studies from Virginia Commonwealth University where she was a research assistant in the Department of Mechanical and Nuclear Engineering.