National Nuclear Security Administration (NNSA) Graduate Fellowship Program

Class of 2025–2026

Closing Ceremony Posters

April 2026
PNNL-SA-222149

Elijah Ahrend
NA-234 Office of Program Support

Overview

NA-234 supports the Office of Material Management and Minimization to implement and maintain effective internal controls, financial management, records management, risk management, and all aspects of the planning, programming, budgeting, and evaluation processes.

Outcomes

As a fellow in the Office of Program Support, I executed key operational and administrative functions to enhance office effectiveness. I prepared executive briefings, tracked and managed action items, reviewed and edited financial documents, analyzed relevant Congressional language, and supported the tracking of office travel funds. I also used my skillset to help the office navigate new capabilities, including artificial intelligence and machine learning.

Elijah Ahrend and fellows at the National Ignition Facility on a fellow-organized trip to Lawrence Livermore National Laboratory.

During the fellowship, I actively expanded my knowledge of the NNSA mission by engaging in high-impact developmental opportunities. I toured Lawrence Livermore National Laboratory to gain a practical understanding of its contributions, and I leveraged valuable opportunities to interact directly with key NNSA leaders. These experiences provided unique insights from seasoned professionals, solidifying my commitment to the national security mission.

Office
NA-234 Office of Program Support

“Through this fellowship, I developed expertise within the nuclear security enterprise and built a robust professional network, gaining both practical skills and valuable connections.”

Education
BS, Mathematics, Gonzaga University

Edgar Aldama
NA-22 Office of Defense Nuclear Nonproliferation Research and Development

Overview

The Office of Defense Nuclear Nonproliferation Research and Development (R&D) prioritizes R&D to detect, locate, and characterize foreign nuclear weapon programs and supports the development of testbeds and research infrastructure. I supported NA-22 by conducting technical merit reviews of white papers and supported the coordination and oversight of R&D projects.

Visit to the underground test facility at the Nevada National Security Sites (NNSS)

Outcomes

NA-22 harnesses the unique facilities and scientific expertise of DOE/NNSA national laboratories, sites, universities, and U.S. industry to conduct research, develop prototypes, and produce sensors for the detection of foreign nuclear weapon programs.

I participated in the assessment of white papers submitted by the national labs, and contributed to conversations within the portfolios of plutonium detection, nuclear test detection, and the nonproliferation stewardship program. My contributions provided insight into niche research topics for white paper considerations, tracked project milestones, and assisted with the communication flow between headquarters and the national labs.

"This fellowship allowed me to see that chemistry sits at the heart of nonproliferation: translating the most complex chemical and isotopic signatures into knowledge and knowledge into national security."

Office
NA-22 Office of Defense Nuclear Nonproliferation Research and Development

Education
PhD, Inorganic Chemistry, Georgia Institute of Technology
BS, Chemistry, The University of Texas at El Paso

Katelyn Anderson
NA-22 Office of Defense Nuclear Nonproliferation Research and Development

Overview

The Office of Defense Nuclear Nonproliferation Research & Development (DNN R&D) directly contributes to national security by developing capabilities to detect and characterize global nuclear threats. It sustains and develops foundational nonproliferation technical competencies by leveraging the unique facilities and scientific skills of the national laboratories to provide technical agility supporting government stakeholders' nonproliferation requirements.

Outcomes

I gained a behind-the-scenes look at program management by engaging with federal program managers and technical advisors across various portfolios, including Weapons Development Detection, Nuclear Test Detection, Remote Detection, and Tritium Production Monitoring. This involved attending regular meetings with national laboratory contacts and observing the full R&D proposal cycle, where I especially valued reviewing white papers and discussing them with program managers.

Katelyn visiting the Hazardous Materials Management and Emergency Response (HAMMER) Federal Training Center.

I also appreciated the opportunities to contribute to annual reports, presentations highlighting impact, and summaries of documents from the national laboratories, which all focused on translating complex technical information for non-technical audiences. My travel to the national laboratories and interagency partners further highlighted the vital importance of collaboration, workforce development, and a deep understanding of sponsor needs for advancing our mission.

“This fellowship, particularly the people, has significantly broadened my skills, shaped my professional trajectory, and opened doors to even more opportunities.”

Office
NA-22 Office of Defense Nuclear Nonproliferation Research and Development

Education
PhD, Chemical and Environmental Engineering, Brown University
BS, Environmental Engineering, University of Delaware

Takara Askew
NA-244 Office of Civil Nuclear Cooperation and Engagement

Overview

The Office of Civil Nuclear Cooperation and Engagement (NA-244) develops strategies to address emerging nonproliferation challenges and opportunities. It provides technical and analytical expertise to support U.S. government nonproliferation objectives, implements DOE's statutory requirements under the Atomic Energy Act of 1954, and strengthens the nonproliferation regime.

Outcomes

I have been deeply involved in several critical portfolios with NA-244, including the Non-Proliferation Treaty (NPT), Nuclear Suppliers Group (NSG), and 123 Agreements. Throughout my fellowship, I have significantly enhanced my analytical and strategic thinking skills, gaining invaluable experience in complex nuclear policy and diplomacy. I supported the NSG team by participating in technical tours at Argonne National Laboratory and Northwestern University's Quantum Cascade Laser.

Takara and the other Fellows meet with NA-20, Dr. Matt Napoli.

- Provided in-depth research and analytical support for the 2026 NPT Review Conference and NSG meetings.
- Actively managed numerous urgent requests for information across multiple portfolios (NPT, NSG, 123, 810).
- Gained critical insight into negotiation dynamics and civil nuclear cooperation by attending several 123 Agreement technical consultations.

Office
NA-244 Office of Civil Nuclear Cooperation and Engagement

"The Nuclear Security Enterprise brings together the country's brightest. I am proud and so grateful to have worked alongside them and hope to be able to further contribute to this mission in the future."

Education
MA, Applied Diplomacy, DePaul University

Abigail Bates
NA-LA Los Alamos Field Office

Overview

At the NNSA Los Alamos Field Office (NA-LA), the Landlord Stewardship Team plays a crucial role in enabling environmental program management for infrastructure, environmental compliance, waste management, and biological and cultural resources. I supported multiple programs to enable oversight integration across the Landlord Stewardship team.

Abigail stands in front of Pond Cabin, which served as an office for Emilio Segrè and his plutonium research team.

Outcomes

- Supported the processes to integrate NNSA environmental requirements into the Department of Energy's legacy cleanup plan.
- Collaborated with stakeholders such as Environmental Management and Environmental, Safety, Health, and Quality at Los Alamos National Laboratory (LANL) to assess applicable requirements for environmental remediation, land transfer, and long-term stewardship decisions impacting LANL.
- Conducted technical reviews to support environmental management mission scope discussions and meetings.
- Participated in assessments and facilities walkdowns to support NA-LA oversight activities in regulatory and infrastructure compliance.
- Helped to establish a communication channel and conducted administrative tasks to support NA-LA engagement with the State of New Mexico and federal stakeholders pertinent to biological and cultural resources.

Office
NA-LA Los Alamos Field Office

"This fellowship offered a unique opportunity to contribute directly to environmental stewardship at a critical national security site. It was incredibly rewarding to ensure that groundbreaking science coexists responsibly with our natural world."

Education
BS, Biology, Indiana University

Luis D. Becerra
NA-115 Office of Engineering and Technology Maturation

Overview

The Office of Engineering and Technology Maturation (OETM) supports the capabilities and technologies that underpin NNSA's ability to design, build, and test the future deterrent. I worked on a new program, Collaborative, Agile, Strength-based Acquisition Advanced Manufacturing (CASA-AM), that is seeking to change how the Nuclear Security Enterprise (NSE) approaches the advanced manufacturing capabilities in the NNSA.

Luis at the National Museum of Nuclear Science and History during an NGFP trip.

Outcomes

I was the first secretariat for an NA-11 Office of research and development program, CASA-AM, whose mission is to fully leverage the AM capabilities across the NSE by creating a coordinating, agile, strengths-based approach to establish a time-phased plan to close the gap between existing and needed AM capabilities within a 3-year cycle.

My role involved working cross-functionally with several members from the labs, plants, and sites, who represented a multitude of specialties. I assisted leadership by scheduling and coordinating meetings and back briefing, generating talking points, and maintaining a centralized repository of materials.

"The fellowship has allowed me to apply my knowledge of both nuclear and electrical engineering, as well as given me insight about the work being done across the NSE."

Office
NA-115 Office of Engineering and Technology Maturation

Education
MS, Nuclear Engineering, University of Florida
BS, Electrical Engineering, California State University, Northridge

Andrea Blanco Camacaro
NA-PAS Office of Partnership and Acquisition Services

Overview

The Office of Partnership and Acquisition Services (PAS) provides NNSA with the people, systems, and processes that NNSA needs to succeed in delivering its unique mission capabilities. During the fellowship, I directly supported the PAS Front Office and Executive Leadership team in operational analysis and planning of the PAS symposium.

Outcomes

As a fellow, I created efficiencies by streamlining processes and documenting standard procedures, as well as co-leading and planning the annual PAS symposium that provides training and leadership discussions to more than 400 contracting officers, contracting officer representatives, and Federal Program Directors across the Nuclear Security Enterprise.

Andrea attends the fellows-led site visit to Oak Ridge, TN, meeting with Y-12 Field Office Manager Mary Helen Hitson.

Additionally, I participated as an NNSA representative in the Department of Energy Office of Small Business Programs strategic working group, opening barriers to small businesses and connecting them with industry partners.

Office
NA-PAS Office of Partnership and Acquisition Services

“This fellowship has taught me so much about the Nuclear Security Enterprise and given me the opportunity to see the incredible work done at the labs, plants, and sites. I’m thankful for the people I have gotten to meet and the connections I have made along the way.”

Education
BA, Economics, University of Florida

Isabelle Bock
NA-24 Office of Nonproliferation and Arms Control

Overview

The NNSA Office of Nonproliferation and Arms Control (NPAC) is an office within Defense Nuclear Nonproliferation (DNN) that supports the American nuclear industry while advancing U.S. nonproliferation, monitoring and verification, and export objectives.

NPAC fellows join other fellows within DNN to take a Team Neon photo during NGFP Orientation in Richland, WA.

Outcomes

The NPAC Front Office team works to coordinate interagency requests between NPAC's four subprograms and DNN. I worked on projects throughout NPAC and had a large focus on budgetary work and report facilitation.

I helped coordinate and enforce timely completion of interagency requests and statutory obligations between Congress, the White House, Department of State, Department of Commerce, and the Department of War.

Office
NA-24 Nonproliferation and Arms Control

"This fellowship provided me with unique insight into nuclear nonproliferation and nuclear security. Working in a front office gave me the opportunity to learn how offices respond to other agencies and work with international partners. I will always be grateful for the experience I had in NPAC and the NGFP fellowship."

Education
MA, International Affairs, George Washington University
BA, Political Science, University of California, Los Angeles

Victoria Bryant
NA-PAS-31 Office of Partnership and Acquisition Services

Overview

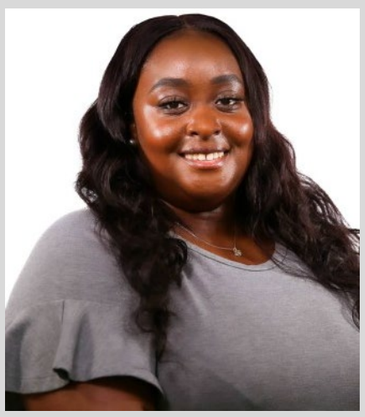
The Office of Partnership and Acquisition Services (NA-PAS) strengthens NNSA's mission by providing essential personnel, systems, and processes. It strategically guides NNSA's Management and Operating (M&O) contracts, Federally Funded Research and Development Centers (FFRDCs), and other agreements.

Victoria visiting the Lawrence Livermore National Laboratory in Livermore, CA.

Outcomes

The Supplies and Interagency Agreements (IA) team, within the Program Support Acquisition Branch, is responsible for assisting the NNSA with high-value contracts for supplies and coordinating and awarding IA with various federal entities to support NNSA’s operational needs.

I supported the Supplies and IA team by conducting market research, assisting with contract placement, preparing solicitations, and supporting pre-award functions. Contracts that I have assisted with support NNSA and its labs, plants, and sites, and other federal agencies. Contracts have varied in dollar amounts, including contracts worth millions of dollars.



“Through the NNSA Graduate Fellowship Program, I connected with leaders across the enterprise, developed strong leadership skills, and refined my existing skillsets, solidifying my commitment to a career in public service.”

Office
NA-PAS-31 Office of Partnership and Acquisition Services

Education
Master of Public Affairs, Brown University
BA, Business Administration Management, Paul Quinn College

Anahi Carrera
NA-LL Livermore Field Office

Overview

Lawrence Livermore National Laboratory's (LLNL) Global Security nuclear forensics team develops analytical techniques to characterize nuclear materials and determine their origin and processing history. These capabilities support the Defense Nuclear Nonproliferation (NA-20) and Counterterrorism & Counterproliferation (NA-80) missions within the NNSA, by enabling attribution and strengthening nuclear security and nonproliferation efforts.

Anahi visiting the Los Alamos National Laboratory during a Fellow-led site visit.

Outcomes

I worked on a technical project leading the development a novel nuclear forensics radiochronometer to determine the production age of nuclear materials. The work included documenting the analytical workflow and authoring standard operating procedures (SOPs) for the method. I successfully produced accurate modeled ages for depleted uranium metal samples.

Additional activities included:

- Training in international nuclear safeguards through the Institute of Nuclear Materials Management
- Policy engagement through LLNL's Center for Global Security Research
- Participation in other Livermore Field Office activities.

Office
NA-LL Livermore Field Office

"This fellowship deepened my understanding of how the NNSA and the national laboratories collaborate to strengthen national security and advance cutting-edge science. I'm grateful for the opportunity to learn from such dedicated and inspiring leaders."

Education
PhD, Earth Sciences, Brown University

Bridgid Chandler
NA-213 Nuclear Smuggling Detection and Deterrence

Overview

The Office of Nuclear Smuggling Detection and Deterrence (NSDD) works with partner countries to help partners deny, detect, and defeat threats related to the smuggling of nuclear and radiological material in order to support the safety and security of America and our interests.

U.S. delegation meets with the Korean National Police Agency.

Outcomes

I assisted foreign affairs specialists to oversee program activities including project management, equipment deployment, testing and acceptance, and capacity building for partner countries in the Balkans, East Asia, and South America.

During my time as a fellow, I supported a major U.S. interagency and multinational leadership symposium in which I helped plan, coordinate, and execute the event.

Office
NA-213 Nuclear Smuggling Detection and Deterrence

“The fellowship helped me develop a deeper understanding of the U.S. nuclear security enterprise. I am especially grateful to have worked in NSDD and to contribute to the U.S. national security mission.”

Education
MS, Security and Resilience Studies, Northeastern University

Josh Lynn Christie

NA-114 Office of Advanced Simulation and Computing

Pacific Northwest NATIONAL LABORATORY

National Nuclear Security Administration

Overview

The NA-114 Office of Advanced Simulation and Computing (ASC) develops and maintains high-performance computing and modeling capabilities that support NNSA's mission. During this fellowship, I analyzed data trends, evaluated software strategies, and contributed to developing an ASC Digital Engineering strategy.

Josh Lynn at the NGFP Career Fair.

Outcomes

During this fellowship, I applied analytical and evaluative techniques to identify trends, data integrity issues, and opportunities for process improvements using digital engineering methodologies. Concurrently, I co-authored two white papers through collaboration with other offices within Defense Program (NA-10), contributing to the development of an internal Digital Engineering strategy to digitalize mission-driven processes.

I also collaborated with the NNSA Tri-lab teams to review the current software stack that is supporting the advanced computing and simulation capabilities and to develop an ASC Systems Software Strategy. Additionally, I was able to create a formal editing and review process for this strategy to ensure visibility to all stakeholders.

I also served as an office liaison supporting the Predictive Science Academic Alliance Program (PSAAP) that ASC manages.

"The best way to move forward is to never stop moving in the first place."

Office
NA-114 Office of Advanced Simulation and Computing

Education
MS/PhD, Computational Data Science and Engineering, North Carolina A&T State University

Elodia Ciprian
NA-83 Office of Nuclear Forensics

Overview

The Material Analysis Program (MAP) within NA-83 is responsible for the analysis of seized or found nuclear material to support the identification of its origin and intended use. The capabilities and operational aspects of MAP are an integral part of the Nuclear Emergency Support Team (NEST), NNSA's multi-mission nuclear response force.

Elodia attending the NGFP Career Fair.

Outcomes

As a Fellow, I gained direct experience in overseeing pre-detonation nuclear forensics exercises and contributed to program planning for NA-83. Working with various partners across the nuclear security enterprise, including international collaborators, was a particularly valuable aspect of my fellowship.

I especially enjoyed leading the development of a program plan for my office, deepening my understanding of nuclear forensics capabilities and operations.

"The fellowship significantly expanded my professional network, extending beyond the national lab actinide community to include headquarters-level connections."

Office
NA-83 Office of Nuclear Forensics

Education
PhD, Actinide Chemistry, University of Notre Dame

Jeremiah Cutright
NA-183 Office of Strategic Planning and Analysis

Overview

NNSA's Office of Strategic Planning and Analysis is responsible for producing the Stockpile Stewardship and Management Plan (SSMP) and leads the NNSA's Nuclear Industrial Base (NIB) Monitoring Program. I worked on projects supporting the NIB Program's critical minerals and Committee on Foreign Investment in the US (CFIUS) portfolios and supported the development of the SSMP.

Jeremiah participates in a tabletop exercise practicing nuclear emergency response.

Outcomes

My work in NA-183 focused on supporting the NIB team's critical minerals and materials (CMM) portfolio. In this capacity, I collaborated with personnel in NNSA, as well as interagency partners in the Departments of War, State, Energy, and more. With these partners, we worked to secure NNSA supply chains and promote long-term trends to improve national CMM interests.

I also assisted on CFIUS projects to fortify the security of labs, plants, and sites and on workforce challenges to help ensure the enterprise can maintain critical skills and knowledge. While supporting these efforts, I was also continuously involved in the SSMP publications process, working to prepare it for public release and meeting with labs, plants, and sites to verify its accuracy.

Office
NA-183 Office of Strategic Planning and Analysis

"NGFP gave me great insight into how the NNSA operates both internally and with interagency partners on strategic nuclear issues and has prepared me for a successful career in the Nuclear Security Enterprise."

Education
MS, Environment and International Affairs, Georgetown University

Vaneza Desrosier
NA-212 Office of Radiological Security

Overview

The Office of Radiological Security (ORS) mission is enhancing U.S. and global security by stopping adversaries from acquiring radioactive material for malicious use. I worked on eliminating risk by removing high-activity radioactive material and, when necessary, replacing this material with advanced technologies.

Vaneza attends the Radiation Research Society Annual Meeting in San Juan, Puerto Rico.

Outcomes

ORS has two main strategies in support of the mission: eliminate and prevent. My work lies in the Eliminate strategy where I support the Cesium Irradiator Replacement Project (CIRP). CIRP is a voluntary DOE/NNSA project that supports the Congressional goal to replace all cesium-137 blood irradiators in the United States by December 31, 2027.

I established new lines of communication with private-sector healthcare leaders for CIRP through targeted intergovernmental and congressional outreach. This initiative successfully contributed to key national security objectives by progressing elimination efforts of radioactive sources in 9 different states.

“Through this fellowship, I have worked on important national security initiatives, traveled across the U.S. and abroad, met with experts, and created a strong network in the nuclear enterprise. This experience has been invaluable.”

Office
NA-212 Office of Radiological Security

Education
MA, International Policy, The University of Georgia

Arch Drury
NA-181 Office of Policy and Requirements

Overview

NA-181 manages and creates system engineering processes and requirements. It also includes the Defense Programs Integrated Modeling and Analysis (DPIMA) team. I focused on capacity modeling projects and requirement databases for DPIMA.

Arch touring the Y-12 National Security Complex in Tennessee.

Outcomes

To optimize operational planning across NA-181 and the enterprise, I engineered a robust stockpile component capacity model that leverages Python's analytical power and Excel's accessibility to track and project warhead component requirements across time.

Through the development and deployment of advanced analytical tools, this initiative directly contributes to strengthening national security by increasing and standardizing stockpile analysis capabilities throughout the national enterprise.

Office
NA-181 Policy and Requirements

“I have enjoyed every minute of this fellowship. It has given me the opportunity to work with national laboratories on pressing issues using the skillset I learned in college.”

Education
MS, Information Systems, University of Utah, Salt Lake City

Samer El-Abd
NA-MB-92 Office of Analysis and Evaluation

Overview

NA-MB-92 encompasses several subteams of scientists and engineers who support a variety of offices and projects across NNSA including infrastructure planning studies, analysis of alternatives, and modeling of early-stage weapons cost estimates.

NGFP Fellows visiting the National Ignition Facility at LLNL.

Outcomes

I had the opportunity to contribute to a number of projects during the course of my fellowship with NA-MB-92. This included several infrastructure projects such as analysis of the facilities and utilities contributing to pit production at Savannah River Site (SRS) as well as an analysis of alternatives study pertaining to production of microelectronic components at Sandia National Laboratories (SNL).

On the modeling side of things, I explored potential improvements that could be made to the backend of our current weapons cost estimation tools. I also tested another model using historic schedule data to better understand the relationships between factors such as schedule, cost, and equipment complexity for new infrastructure projects.

Office
NA-MB-92 Office of Analysis and Evaluation

“The fellowship helped me bridge the gap between the technical knowledge gained from my graduate degree and the necessary background knowledge for a successful career in national security.”

Education
PhD, Astronomy, University of Virginia
MS, Astronomy, University of Virginia

Grant Falk
NA-213 Office of Nuclear Smuggling Detection and Deterrence

Overview

The Office of Nuclear Smuggling Detection and Deterrence (NSDD) counters the smuggling of radioactive and nuclear materials.

En route to conduct a site survey with partners in Kazakhstan.

Outcomes

I supported counter nuclear smuggling activities in Central Asia and the Middle East; conducted site surveys; deployed next-generation detection technologies; facilitated joint operational exercises; and coordinated with U.S. interagency and international nuclear forensics partners.

These efforts strengthened partner-nation operational readiness and advanced NNSA's nonproliferation mission.

Office
NA-213 Office of Nuclear Smuggling Detection and Deterrence

"The fellowship deepened my understanding of the nuclear security enterprise. Working at NSDD gave me firsthand experience into how nuclear security and deterrence policy advances U.S. national security."

Education
MA, Global Security Studies, Johns Hopkins University

Isaias Fernandez
NA-121.4 Office of Nuclear Enterprise Assurance

Overview

The Nuclear Enterprise Assurance (NEA) Program proactively safeguards the integrity and reliability of the nation's U.S. nuclear deterrent against sophisticated adversarial subversion. The Program assembles and deploys specialized counter-subversion expertise across the Nuclear Security Enterprise (NSE).

Isaias at the National Museum of Nuclear Science and History in New Mexico.

Outcomes

Through the invaluable support of my mentors and colleagues, I achieved a dream—directly contributing to the modernization of the nuclear stockpile and enterprise. I found myself at a table of equals, where I not only learned but also offered a fresh perspective.

I built strong relationships across the enterprise, both in person and online, which allowed me to begin solving problems and continuously learn throughout the year. Even with a background in defense policy, this experience significantly expanded my technical knowledge of the stockpile.

Office
NA-121.4 Office of Nuclear Enterprise Assurance

“Through this fellowship, a kid from Texas got to travel the country and witness firsthand the machinery and people who transform deterrence from a concept into a tangible sentinel of peace.”

Education
MIA, Master of International Affairs in National Security
Bush School of Government, Texas A&M University

Vince Galvan
NA-114 Office of Advanced Simulation and Computing (ASC)

Overview

The ASC office oversees the development of the physics models, computer codes, and supercomputers that are used to model all aspects of the weapons in our stockpile. The efforts of the ASC program, in conjunction with the Office of Experimental Science (NA-113) and the Office of Engineering and Technology Maturation (NA-115), allow for the annual assessment and certification of the stockpile without the use of nuclear underground testing.

Vince at the NVIDIA GTC conference in Washington D.C. Behind him is a model of a quantum computer.

Outcomes

To fulfill its mission, the ASC program interacts with troves of data that is generated and owned throughout the enterprise regarding our stockpile. Defense Programs (NA-10) is in middle of a digital transformation that optimizes data sharing, curation, and storage to mine as much knowledge from this data. I co-authored the development of a brand-new Digital Engineering (DE) strategy that identifies the data pipelines, along with their respective owners, that the ASC program has equities in and provides guidelines for standardizing data handling and generation within all the ASC subprograms. Additionally, I had the opportunity to attend multiple science conferences on AI and supercomputing where I learned about emerging technology and techniques relevant to the ASC mission.

Office
NA-114 Office of Advanced Simulation and Computing

“The fellowship granted me many opportunities to meet many of the scientists and engineers working throughout the enterprise, showing me how integral science and technology is to the Defense Programs’ mission.”

Education
MS, Nuclear Science and Engineering, Massachusetts Institute of Technology

Adrian Garcia
NA-MB-91 Office of Programming

Overview

The NNSA's Office of Programming within the Office of Management & Budget (NA-MB) leads the programming portion of the Planning, Programming, Budgeting, and Evaluation process within NNSA. During the fellowship, I primarily worked on facilitating the implementation of user experience updates for the internal Oracle database "FormEX," optimizing staff workload using data, and supporting various studies within NA-MB-92.

Adrian connects with a Kansas City National Security Campus representative to ask about his experience working in the Nuclear Security Enterprise.

Outcomes

The newly implemented FormEX and Tableau improvements introduce a new interactive grid-user interface that enables users to easily view, filter, and interact with FormEX data, moving beyond static CSV submissions. This new interface allows for comprehensive cell and row editing capabilities, while also streamlining data correction processes during Programming.

Similarly, the Programming staff workload study aims to equitably assign program offices to individual staff members during the Programming cycle to improve workload distributions. The new distribution considers a multitude of factors and improves upon previous distribution practices by leveraging web-based employee monitoring to optimize employee workloads. This new capability will enable NA-MB to better proactively target support to federal programs.

Office
NA-MB-91 Office of Programming

"The NGFP fellowship has been instrumental in my professional development. Learning more about the NNSA budget process and how decisions are made has been an amazing experience."

Education
MS, Scientific Computing and Applied Mathematics, University of California, Santa Cruz

Jonathan Garcia
NA-193 Office of Warhead Assembly & Non-Nuclear Modernization

Overview

The Office of Warhead Assembly and Non-Nuclear Modernization (NA-193) modernizes the infrastructure and technologies for non-nuclear components, high explosives and energetic materials, and warhead assembly capabilities needed to sustain and advance the U.S. nuclear deterrent.

Outcomes

During my fellowship with NA-193, I contributed to the nation's nuclear security by supporting the Enterprise's production modernization. As a fellow in NA-193's front office, I supported our leadership team by participating in senior staff meetings and monthly status updates with the labs, plants and sites, as well as coordinating our programs' inputs for the annual Stockpile Stewardship and Management Plan.

Jonathan and other NGFP Fellows with a Mk21 reentry vehicle at the Association of the U.S Army Annual Meeting.

This experience has given me a deep understanding of federal oversight, program management, and the programming, planning, budgeting, and evaluation processes that support weapons acquisition and the safety and effectiveness of the nuclear stockpile.

Office
NA-193 Office of Warhead Assembly & Non-Nuclear Modernization

"It has been the privilege of a lifetime to support NNSA at such a critical point in our nation's nuclear security. Interacting with peers and leadership alike has been an invaluable experience, and this fellowship is the beginning of what I hope will be a long and fruitful career in the nuclear enterprise."

Education
MA, Security Policy Studies, The George Washington University

Dylan Girone
NA-40 Office of Emergency Management

Overview

The Office of Emergency Management (NA-40) is tasked with executing preparedness, operations, and continuity activities across the DOE and NNSA labs, plants, and sites. I had the opportunity to work with each program office on a variety of data analysis and automation projects ranging from regulatory compliance to physics-based models.

Dylan attended an exercise simulating decontamination efforts at the Defense Nuclear Weapons School.

Outcomes

NA-40 seeks to provide its customers timely, accurate, and streamlined approaches for effective and efficient emergency management. My primary contribution to this mission came in the form of data processing and visualization to track readiness and continuity reporting, ensuring leadership had a synthesized view of the whole enterprise's capabilities.

I also offered technical support to our emergency management partners. I developed code to ensure mass consistency in three-dimensional wind inputs for plume modeling in coordination with the National Atmospheric Release Advisory Center and developed a novel model for predicting wildfire growth. These efforts help ensure a more resilient nuclear security enterprise.

"The fellowship deepened my appreciation for the amalgamated scientific efforts of DOE. The no-fail mission of NNSA has persisted in various iterations for generations, and it is thrilling to add to that legacy."

Office
NA-40 Office of Emergency Management

Education
MS, Atmospheric Sciences, University of Arizona

Lucas Gonzales
NA-MB-81 Weapons Activities Resource and Matrix Team

Pacific Northwest NATIONAL LABORATORY | National Nuclear Security Administration

Overview

NA-MB-81 provides direct budget support to programs within the Weapons Activities appropriation account to implement all aspects of the planning; programming; budget formulation and execution; and evaluation (PPBE) process. I supported the evaluation component of those responsibilities.

Lucas and other Fellows visit the HAMMER Federal Training Facility during Orientation in Washington.

Outcomes

My primary work product was a program written in Visual Basic for Applications within Excel to automate the production of a weighted funding threshold report. My program takes as input a CSV file containing the data from the NNSA's monthly base financial report and outputs a neatly formatted stat table that compares the weighted funding threshold against the unexpended and uncosted ratios of total funds for each program. This report can be used to track rate of execution from month to month. I also provided data validation support, helped draft language for proposed legislative changes regarding NNSA budget processes, and performed general office duties.

Office
NA-MB-81 Weapons Activities
Resource and Matrix Team

"As a writer assigned to a program analyst role in a budget office, I can confidently say that my time in the fellowship proves I can add value to any organization; the range of my prior professional experience allows me to be useful anywhere."

Education
MFA, Creative Writing, University of Texas at Austin
BA, English, Western Washington University

Elizabeth Gravitt
NA-MB-42 Office of Learning and Career Management

Overview

I supported the NNSA Knowledge Preservation Project, led by the Office of Learning and Career Management and the Office of Environment, Safety, and Health. The project addresses the challenge of capturing and transferring knowledge from exiting employees to the existing and future workforce. Its core mission is to safeguard vital institutional knowledge.

Outcomes

I conducted more than 20 leadership interviews, which provided data for knowledge transfer initiatives and presented the project to NNSA leadership, including Chiefs of Staff. Additionally, I managed the SharePoint site, significantly improving accessibility for users, developed internal systems, and created critical databases—all integral to the project's success in preserving vital knowledge.

NGFP Fellows and IMPACT Interns at ORNL X-10 Graphite Reactor during an Oak Ridge site visit.

I planned and executed two key site visits, including the comprehensive trip to Oak Ridge (Y-12 and ORNL) and Pantex. The coordination encompassed helping to build the agenda, ensuring secure transportation, lodging, and strictly adhering to all badging and site protocols.

These visits strengthened relationships and facilitated a deeper operational and stakeholder understanding.

Office
NA-MB-42 Office of Learning and Career Management

“This fellowship allowed me to apply my skills to effectively contribute to the NNSA’s mission. As the only Fellow in Oak Ridge, Tennessee, it allowed me the opportunity to gain a greater understanding of how the work being done in Oak Ridge is vital to mission success.”

Education
BA, International Relations, San Francisco State University

Emily Harris
NA-113 Office of Experimental Sciences

Overview

The Office of Experimental Sciences (OES) manages facilities that produce experimental data for the U.S. nuclear stockpile. During my fellowship, I developed communication tools that provide high-level overviews of OES-supported facilities, targets, and diagnostics. I also led a portfolio study assessing target fabrication capabilities for our High Energy Density (HED) experiments.

Emily visits Lawrence Livermore National Laboratory with other NGFP Fellows Andrea Blanco (NA-PAS) and Veneza Desrosier (NA-212).

Outcomes

HED experiments use specialized targets to produce scientific data that aid in the stockpile's annual assessment. My study evaluates current research and development of HED targets performed across the national lab complex and assesses the resources available to support these experiments. By mapping these efforts to OES's science objectives, the analysis identifies gaps that may limit future experimental capabilities. The results of this study will help to inform strategic planning and future investments in HED target development, which is a small but crucial component in ensuring the reliability of the nation's nuclear deterrent.

"This fellowship has given me the invaluable opportunity to collaborate with and learn from scientists and experts across the Nuclear Security Enterprise."

Office
NA-113 Office of Experimental Sciences

Education
PhD, Nuclear Physics, Texas A&M University

Amanda Hart
DOE-IN-15 Office of Intelligence and Counterintelligence, Energy Security Division

Overview

The Energy Security Division operates within the Department of Energy's Office of Intelligence and Counterintelligence, focused on foreign intelligence analysis. DOE-IN-15 informs senior government officials and the Intelligence Community about trends in global energy issues, including traditional fuel sources, advanced energy technology, and critical minerals.

Amanda attending the International Nuclear Law Essentials (INLE) course run by the Organization for Economic Cooperation and Development (OECD).

Outcomes

The Energy Security Division was divided into regional and global trends. As an All-Source Analyst in global trends, I produced multiple intelligence products on electric power generation, deep-sea critical minerals exploration, and energy technology markets, three of which are intended for classified publication and dissemination. I also managed the curation and presentation of intelligence brief books for the Deputy Secretary of Energy and inner-agency offices.

Throughout this year, these efforts have contributed to directly informing Intelligence Community partners and senior policymakers of national and global security concerns affecting U.S. interests and enabling the implementation of various administration priorities. This was particularly important during ongoing, globally impacting events, including in Ukraine, Venezuela, Cuba, and Iran.

"The NGFP fellowship provided me with vital insights into analytical production and inter-agency coordination across the greater Nuclear Security Enterprise. It also acted as my introduction to the U.S. Intelligence Community, undeniably laying the groundwork for my future career."

Office
DOE-IN-15 Office of Intelligence and Counterintelligence, Energy Security Division

Education
MA, International Security and Intelligence, George Mason University
BA, National Security and Foreign Affairs, Virginia Tech

Tanner Heatherly
NA-122.4 Weapon Security and Control Division

Pacific Northwest NATIONAL LABORATORY

NNSA National Nuclear Security Administration

Overview

The Weapon Security and Control Division (NA-122.4) supports nuclear surety programs to prevent the misuse of the U.S. nuclear stockpile. The office maintains the safety and security of the nuclear deterrent by enabling safe, authorized use while preventing unauthorized use.

Tanner (NA-122.4) and Eleni Zervos (NA-12) supporting the Senate Armed Services Committee (SASC) engagement on Capitol Hill.

Outcomes

In this role, I coordinated between several Defense Programs offices and national laboratories to establish nuclear surety priorities for the current and future stockpile. This effort culminated into executive direction to inform stockpile risk and funding decisions across multiple programs and laboratories. Separately, I supported my office on the Container Working Group (CWG), which investigates future nuclear weapon container technologies. The CWG has embarked on a 120-day study to investigate several container options; the results of which will inform future weapon security improvements at the national laboratories and manufacturing efforts at the sites.

Office
NA-122.4 Weapon Security and Control Division

“The NNSA Graduate Fellowship Program has been an incredibly enriching experience, both professionally and personally. The integration of technical and governmental programs has been invaluable, and I’m excited to continue supporting nuclear security after the fellowship.”

Education
MS, Nuclear Engineering, Oregon State University

Joseph Henning
NA-192.2 Defense Fuels

Overview

NNSA's Defense Fuels (DF) Program (NA-192.2) is responsible for ensuring a reliable supply of unobligated enriched uranium for defense missions, including low-enriched uranium (LEU) for tritium production and highly enriched uranium (HEU) for naval nuclear propulsion. My work focused on supporting the development of the Domestic Uranium Enrichment Centrifuge Experiment (DUECE).

Joseph with the Defense Fuels team visiting the construction site for the Centrifuge Manufacturing Development Facility.

Outcomes

In my program management role in DF, I coordinated closely with Oak Ridge National Laboratory and third-party experts to guide the research and development of the DUECE centrifuge. This involved overseeing the administration of various tests and facilitating the adjudication of its Technology Readiness Levels to mature the centrifuge's design.

Additionally, I helped develop the National Environmental Policy Act (NEPA) strategy for the upcoming deployment of the DUECE centrifuge within an enrichment pilot plant. This experience provided insight into the intersection of environmental regulatory compliance and national security objectives, significantly enhancing my understanding of complex federal projects.

Office
NA-192.2 Defense Fuels

"One of the most valuable parts of NGFP is the professional network that fellows have access to. The connections I have made with technical experts in the enterprise will be invaluable in my career."

Education
PhD (In Progress), Nuclear Astrophysics, Louisiana State University

Stephen Hernandez
NA-122.3 Air Delivered Weapons Division

Overview

The Air Delivered Weapons (ADW) Division ensures the safety and reliability of the nuclear triad's air leg, specifically bombs and cruise missiles. My role as a fellow embedded me directly within a weapons program and surveillance team. I supported stockpile analysis, assisted with hardware management, and collaborated extensively with program managers, scientists, and engineers across laboratories, plants, and sites.

Stephen at the NGFP Career Fair in Washington D.C., speaking with a recruiter for the Strategic Systems Programs.

Outcomes

The ADW Division plays a pivotal role in upholding the U.S. strategic deterrent. As a fellow, I worked with a team that accomplishes this mission daily. More specifically, my efforts facilitated the authorization of necessary activities at various sites and ensured adherence to requirements and policies through the drafting of directive work authorizations. I also supported the surveillance team, summarizing technical reports on stockpile health and assisting with the coordination of integrated weapons evaluation requirements. Ultimately, my contributions advanced initiatives that underpin national security by ensuring a safe, secure, and reliable nuclear stockpile.

“The difference between my understanding of the NNSA before and after this fellowship is truly night and day. The perspectives gained, the opportunities afforded, the talented individuals met, and the work achieved all created a uniquely formative and transformational experience for me.”

Office
NA-122.3 Air Delivered Weapons Division

Education
MS, Mechanical Engineering, The University of Texas at El Paso

Levko Higgins
NA-191.2 Savannah River Site Plutonium Modernization Program

Overview

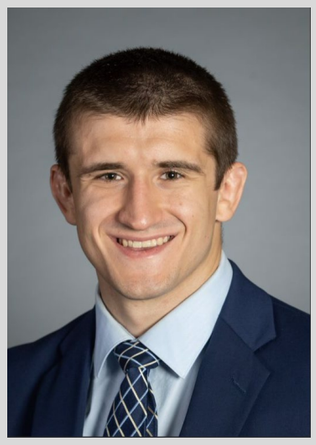
NA-191.2 contains the equities of pit production modernization at Savannah River Site (SRS). This office provides program and project management oversight across efforts to establish a pit production capacity at SRS to meet NNSA and Department of War (DoW) requirements for pit production, essential for maintaining the Nation's nuclear deterrent.

Levko and Brian Morrow (Air Force, 191.2) in the High-Fidelity Training and Operations Center at SRS.

Outcomes

The flagship line-item project within this office is the Savannah River Plutonium Processing Facility (SRPPF). The SRPPF line item contains infrastructure recapitalization necessary to produce pits. The pit production program surrounds the project and has the purpose of producing pits upon the completion of the project.

I led risk assessment for the program analyzing schedule and cost impacts. I supported the oversight of the competency development program in place to ensure a large and qualified workforce to produce pits at SRPPF, once the facilities are operational.



Office
NA-191.2 Savannah River Site Plutonium Modernization Program

"It is an incredible honor and privilege to contribute to such a vital mission of national security, and the blessing only compounds with the many incredible experiences I have had and the many doors it has opened."

Education
MS, Nuclear Engineering, The Pennsylvania State University

Adriana Jaramillo
NA-242 Office of Nuclear Export Controls

Overview

The Office of Nuclear Export Controls' International Nonproliferation Export Control Program (INECP) works to build domestic and global capacity to detect and prevent the illicit or inadvertent transfers of weapons of mass destruction (WMD)-related materials, equipment, and technology. I supported international engagements and the U.S. Enforcement portfolio.

Adriana at an Introduction to Licensing Workshop in Doha, Qatar.

Outcomes

I supported program managers in their international and domestic engagements, including workshops in Qatar and Kazakhstan, as well as their interagency work with U.S. Export Enforcement agencies, conducting export data analysis to identify and prevent adversaries from exploiting the U.S. scientific and industrial base. I also had the opportunity to lead this year's Latin America Regional Webinar Series, an initiative guided by our regional partners to provide a forum for government representatives to discuss critical topics in the field of strategic trade controls, fostering networking and collaboration among the countries represented.

This work has deepened my understanding and appreciation of the extensive and multifaceted work that goes behind the scenes to protect our national security and the key role export controls play in this vital area.

Office
NA-242 Office of Nuclear Export Controls

"This fellowship has been an amazing experience of nonstop learning and exceptional professional development. Working alongside a diverse network of nonproliferation experts across the Nuclear Security Enterprise has provided invaluable hands-on government, international, and interagency experience."

Education
MA, International Affairs, International Security Studies, George Washington University

Laura Jordan
NA-23 Office of Material Management and Minimization

Overview

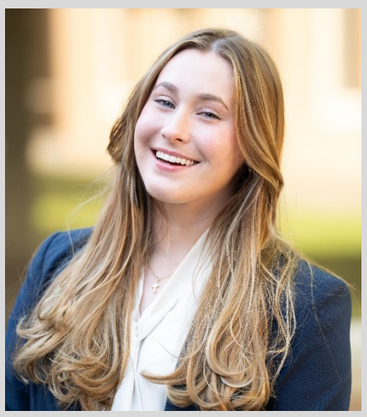
The NNSA Material Management and Minimization (M3) program mission is to deny terrorists and adversary state actors the materials needed to produce a nuclear weapon by minimizing the need for and presence of weapons-usable nuclear material around the world.

Jordan attended the 4th International Symposium on HEU Minimization in Oslo, Norway.

Outcomes

I worked in the front office for M3, where I provided extensive direct support to the Assistant Deputy Administrator and led the coordination of all critical taskers between the Office of Defense Nuclear Nonproliferation and M3's four program offices. In my role, I streamlined new and recurring action items across program offices to coordinate timely input supporting leadership engagements with outside stakeholders, while also enabling NA-23 programs and leadership more time dedicated to operations and mission execution.

Throughout my fellowship, I supported preparations for and joined domestic and international meetings to see how M3 accomplishes mission objectives while maintaining foundational partnerships.



Office
NA-23 Office of Material Management and Minimization

"This fellowship was an invaluable professional experience and pathway into the Nuclear Security Enterprise. I am grateful to be a member of the NGFP cohort and for the opportunity to provide extensive support to the NA-23 office."

Education
Master of International Affairs, The Bush School of Government and Public Service at Texas A&M University

Huy Le
NA-122.1 Stockpile Services Division

Overview

NA-122.1 supports day-to-day logistics, operations, and required services to ensure our stockpile needs are met. Our portfolio includes Multi-Weapon Systems (MWS), Product Realization Integrated Digital Enterprise (PRIDE), and Weapons Dismantlement and Disposition (WDD). I supported the creation of online tools that streamlined information and enhanced processes, allowing our team to operate more effectively.

Huy visits the National Museum of Nuclear Science and History in Albuquerque, New Mexico.

Outcomes

The online platforms I supported development for include AIRO (Automation & Integration for Robust Operations) and W^2MS (Weapon Workload Management System). I focused on digital interfacing to enhance usability for our team.

My other exploits involve attending trainings and events on topics such as nuclear weapons physics and nuclear policy, as well as the Office of Stockpile Management's yearly budget execution review. These opportunities gave me a fundamental understanding of how our weapons work, our nation's deterrence strategy, and NNSA's budgeting process.

"I was unfamiliar with the Nuclear Security Enterprise, but this fellowship showed me the critical role NNSA and its various labs, plants, and sites play in maintaining our deterrence and, ultimately, keeping our nation safe."

Office
NA 122.1 Stockpile Services Division

Education
BS, Cognitive Science, University of California, San Diego

Andres Linares
NA-SN Sandia Field Office

Overview

The Sandia Field Office's (SFO's) Engineering (ENG) team conducts oversight of Sandia National Laboratories (SNL) activities regarding nuclear facility operations; facilities/infrastructure/project management; and environmental compliance activities in support of SNL mission objectives. I worked on projects focused on risk-based oversight and nuclear facility assessments.

Andres briefing SFO on Power BI Risk Matrix Dashboard.

Outcomes

I helped with the tri-annual assessment of the nuclear facilities at SNL, examining the programmatic implementation of their Maintenance Safety Management Program. These efforts helped to improve SNL's nuclear facility maintenance management program through a performance-based assessment.

I built Power BI tools for the SFO's ENG team. These tools help the ENG team better evaluate risk and oversight activities.

I helped build Power BI dashboards for SNL's Integrated Supply Chain Team and integrate databases. These projects helped streamline critical data for SNL analysts.

Office
NA-SN Sandia Field Office

"This fellowship gave me valuable knowledge into so many critical aspects of working in the national security space. Working at the federal level of a national laboratory provided me insights into how national labs, like Sandia National Laboratories, provide exceptional service in the national interest."

Education
MS, Information Systems and Operations Management, University of Florida

David Lu
NA-233 Office of Plutonium Disposition

Overview

The Office of Plutonium Disposition supports the U.S. Department of Energy (DOE) in the execution of Presidential Executive Orders regarding the use of surplus plutonium for industry, removal of material from the State of South Carolina in accordance with DOE's legal obligations, and engagement with international partners to support responsible plutonium management.

David visits the Mobile Melt Consolidate as part of a tour of NA-23 equities at the Savannah River Site.

Outcomes

As an NGFP Fellow, I supported the management of multiple office-sponsored programs, such as reviewing deliverables and engaging with partners as part of the Strategic Laboratory Assessment; Advanced Integrated Recovery and Extraction System; and International Programs. I also served a lead role in managing and improving the flow of information to update NNSA leadership on NA-233 programmatic changes and capabilities.

Beyond headquarters, I attended conferences, technical exchanges, and site visits with counterparts from across the Nuclear Security Enterprise and abroad to support mission execution. Altogether, my efforts as a Fellow helped demonstrate realignment of the NA-233 mission with Presidential Executive Orders regarding surplus plutonium and leveraging NNSA's capabilities to advance the U.S. nuclear energy industry.

Office
NA-233 Office of Plutonium Disposition

"As an early-career scientist interested in applying my skills in government, the NGFP Fellowship provided an impactful experience that introduced me to nuclear security, taught me how to manage programmatic changes, and ultimately validated my career interests."

Education
PhD, Chemical Engineering, University of Kentucky

Melissa Lumogdang
NA-NV Nevada Field Office

Overview

The Assistant Manager of Environment, Safety, and Health sub-office manages the operational safety, security, and environmental oversight across the Nevada National Security Sites (NNSS). These duties assure the safety of the ongoing work at the NNSS while enabling the groundbreaking research conducted therein.

Melissa visits the Z-Pinch Experimental Underground System (ZEUS) detector wall at the NNSS in North Las Vegas.

Outcomes

My role assisted in the drafting of safety evaluation reports (SERs) and safety review letters (SRLs) for the work at the NNSS. SERs and SRLs include safety features and design criteria to ensure federal compliance and provide reasonable assurance for the security of the NNSS contractors and their work.

Some of the projects I worked on include the Enhanced Capabilities for Subcritical Experiments (ECSE) and Facility Worker Self-Protection (FWSP). These oversight reports safeguard the continued safety at the NNSS and are a key component to the optimized performance and seamless execution of NNSS projects.

Office
NA-NV Nevada Field Office

“This fellowship has been an amazing opportunity to gain personal experiences and knowledge of the intricacies of the nuclear space, especially related to the roles of labs, plants, and sites. The skills learned will be a great asset in my future career path.”

Education
PhD, Chemistry, Brigham Young University

Adam Mafi
NA-122.2 Ballistic Missile Weapons Division

Overview

The Ballistic Missile Weapons Division (BMWD) directly supports the sustainment activities for two thirds of the nuclear triad. BMWD also supports the 1958 United States -United Kingdom Mutual Defense Agreement (MDA). I worked on projects throughout the BMWD with a focus on MDA activities.

Adam conducting radiation swipe testing while participating in the International Atomic Energy Agency Safeguards: From Theory to Practice Training Course at PNNL.

Outcomes

Through my work in the BMWD, I completed various projects that supported the nuclear triad and the MDA. One specific project is the drafting and finalizing of NNSA MDA program of record requirements documents. This project alone advances our capabilities with enterprise stakeholders and our strategic partnership with the United Kingdom.

Through my fellowship, I directly contributed to the NNSA mission by completing key projects related to MDA initiatives and the nuclear triad. These efforts concurrently advanced the strategic partnership between the United States and the United Kingdom, thereby strengthening NNSA's critical national security objectives.

Office
NA-122.2 Ballistic Missile Weapons Division

“The fellowship provided great insight to the dedication and tenacity our country has to peace through diplomacy and strength.”

Education
BS, Mechanical and Nuclear Engineering, Virginia Commonwealth University

Luke Maloney
NA-772 Insider Threat Program

Overview

The NA-772 Insider Threat Program (ITP) operates under the Office of Defense Nuclear Security (NA-70) to deter, detect, and mitigate insider threats. An insider threat is the threat that an insider will use his/her authorized access, wittingly or unwittingly, to do harm to the United States.

Luke and Cadet Ethan Cho investigated the risks and benefits of incorporating AI into NNSA functions.

Outcomes

The NA-772 ITP at NNSA headquarters (HQ) holds monthly NNSA ITP implementation panels, engages in capacity building with the sites, and operates a Center for Security Technology, Analysis, Response, and Testing (CSTART) information-sharing portal, among other duties. I facilitated monthly implementation panels with eight sites and field offices. I was responsible for the CSTART online portal to coordinate NNSA ITP policy and planning activities with NNSA HQ, NNSA field offices, and NNSA site ITP personnel. Additionally, I coordinated with the U.S. Military Academy and subject matter experts across the NNSA to proactively address nascent risks posed by AI implementation. These efforts helped create a more united and vigilant security culture across the NNSA sites.

Office
NA-772 Insider Threat Program

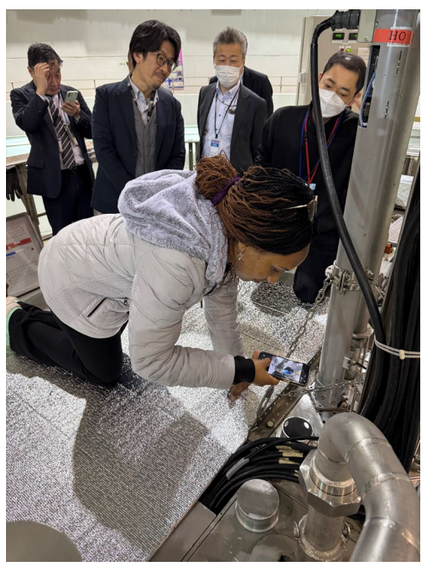
“The fellowship gave me an opportunity to ‘peek under the hood’ of the Nuclear Security Enterprise and learn about a wide range of risks facing each site, while navigating their cultural differences.”

Education
MA, International Relations, American University
BA, History and Spanish, The Ohio State University

Jaha McClean
NA-231 Office of Reactor Conversion and Uranium Supply

Overview

The Office of Reactor Conversion and Uranium Supply (ORCUS) works to create a safer global environment through the conversion of research reactors fueled by highly-enriched uranium (HEU) to high-assay low-enriched uranium (HALEU) fuels. My work focused on Japanese reactor conversions, domestic molybdenum (Mo-99) production, and HALEU supply.



Jaha visits the Kindai University (left) and Kyoto University (right) research reactors during her trip to Japan.

Outcomes

I supported the Mo-99 program by planning and preparing material for the annual stakeholder's meeting, reviewed information from technical reports, and developed an understanding of different Mo-99 production methods and the scientific achievements of the program. For the HALEU scope, I conducted research to inform the regulatory strategy for a potential HALEU metallization capability.

I traveled to Japan and participated in a Lessons Learned meeting that I had prepared, toured three research reactors, and utilized my Japanese language abilities. Additionally, insights from the regulatory research could extend beyond the office and help to inform other entities as more fuel cycle facilities come online to support new reactors.

Office
NA-231 Office of Reactor Conversion and Uranium Supply

"This fellowship has allowed me to live out my dream of working at the intersection of science and international affairs. From joining technical chemical process design meetings to translating for our Japanese partners, I have gained unique and important experiences that have helped me grow as a person and as a professional."

Education
MA, International Affairs, University of California, San Diego
BS, Biochemistry, University of California, Los Angeles

Matt McCracken
NA-1.1 Enterprise Planning and Analysis

Overview

The Office of Enterprise Planning and Analysis supports NNSA's critical national security mission through high-level strategic planning, integration, and analysis on cross-cutting issues. I worked on the Integration and Analysis Team, tasked with overseeing strategic analyses on emerging issues for NNSA's mission space in partnership with program offices and the labs, plants, and sites.

Acting NA-1.1 Director Sean Muth presented Matt with a Certificate of Appreciation for overseeing NA-1.1 analysis work during the 2025 lapse in appropriations.

Outcomes

As front office support, NA-1.1's function evolves with each new administration. I helped oversee and direct analyses on emerging national security issues relevant to NNSA with our lab partners. I had the opportunity to draft and brief an independent analysis highlighting the challenges facing NNSA's drive to accelerate delivery for the production mission.

I also supported our Office Director, providing memos, analyses, and other supporting documents, including for meetings with NNSA leadership. I assisted the program director for Strategic Partnership Projects by supporting monthly meetings and drafting memos on the scope and management of the program. This work directly advanced NA-1.1's leadership support function.

Office
NA-1.1 Enterprise Planning and Analysis

"The fellowship provided me with a great opportunity to learn about NNSA's unique mission by supporting that mission at the front office level. Collaborating across the enterprise gave great insight into how NNSA functions and how administration priorities are implemented."

Education
MA, Public Policy, Liberty University

Amber Moin
NA-18 Office of Systems Engineering and Integration, Front Office

Overview

The Office of Systems Engineering and Integration advocates for the application of systems engineering principles in the management and execution of NNSA's mission. The office works to make meaningful improvements in the quality of program, project, and portfolio management.

Amber with other Fellows at an Oak Ridge Fire Department station near the former K25 site.

Outcomes

For the first half of the fellowship, I integrated edits and comments into the Stockpile Responsiveness and Management Plan (SRMP) as a member of the NA-183 team. My contributions enhanced clarity and accessibility of graphics contained within the SRMP, based on Midway's principles and Section 508 guidelines.

During the second half of the fellowship, I partnered with NNSA's Office of Management and Budget to facilitate the entry of more than $30 billion of program scope and budget positions into the NNSA FormEX system. I teamed with a multidisciplinary group of federal employees and contractors to integrate the entire Weapon Activities portfolio prior to the Spring Programming Meeting and supported the budget decision-making process.

"My greatest drive is my desire to learn, especially in fields that I normally wouldn't have the opportunity to touch. In that regard, this fellowship has been the most successful single year of my working career."

Office
NA-18 Office of Systems Engineering and Integration, Front Office

Education
ME, Systems Engineering, Colorado State University

Alexandria Molinari
NA-81 Office of Nuclear Incident Preparedness and Collaboration

Overview

NA-81 Office of Nuclear Incident Preparedness and Collaboration (NIPC) is the training arm of the Nuclear Emergency Support Team (NEST). I helped to support emergency response trainings and identify areas of need for future international trainings and engagements.

NGFP Fellows in front of a NEST helicopter.

Outcomes

NA-81 works to create and facilitate trainings, workshops, and tabletop exercises to simulate and prepare for nuclear emergencies of all origins for domestic and foreign partners. To support this mission, I helped create country assessments, a domestic prioritization model, and assisted trainings and workshops.

By working with foreign partners and domestic governmental organizations, the trainings can fill knowledge gaps and identify future needs and areas of improvement. These trainings help first responders prepare for and prevent potential emergency situations.

Office
NA-81 Office of Nuclear Incident Preparedness and Collaboration

“My experience with NA-81 helped me understand the importance of interagency collaboration and knowledge sharing in support of nuclear safety and emergency response.”

Education
MA, Nonproliferation and Terrorism Studies, Middlebury Institute of International Studies
MA, International and Regional Studies, University of Michigan

Seamus Murphy
NA-193 Warhead Assembly and Non-Nuclear Modernization

Pacific Northwest NATIONAL LABORATORY

National Nuclear Security Administration

Overview

NA-193 enables the assembly of warheads and the delivery of non-nuclear components and energetics. To achieve this, the office strengthens supply chains, improves production coordination, and modernizes infrastructure. These efforts increase capacity, reduce risk, and sustain critical testing and microelectronics capabilities.

Seamus participated in the Public Policy and Nuclear Threats Boot Camp at the UC Institute on Global Conflict and Cooperation.

Outcomes

I supported production modernization by aligning FY 2027 Stockpile Responsiveness and Management Plan (SRMP) inputs across the three NA-19 program, ensuring consistent priorities. Additionally, I drove the adoption of a Power BI dashboard that provided a shared, real-time view of project information, improving stakeholder coordination and decision-making.

Through this work, I applied and strengthened my skills in change management and stakeholder engagement in service of the nuclear security mission.

Office
NA-193 Warhead Assembly and Non-Nuclear Modernization

“As we move into a multipolar world, our ability to maintain and modernize critical nuclear infrastructure is paramount. This fellowship strengthened my understanding of the operating environment and where I can contribute to mission growth.”

Education
Master of Public Policy, University of Chicago
BS, Cornell University

Alexandra Myers
NA-LA Los Alamos Field Office

Overview

NA-LA's Office of Mission Assurance is responsible for programmatic and quality assurance oversight of national security-related scope at Los Alamos National Laboratory.

I coordinated technical and administrative reviews of weapons quality assurance procedures to ensure compliance with NNSA policies.

Alex visiting the Manhattan Project National Historical Park at Los Alamos National Laboratory.

Outcomes

- Participated in Quality Assurance Survey activities to ensure compliance with quality requirements.
- Completed a review of the Field Office's weapons quality assurance documentation.
- Managed the rewrite and update of the Field Office's weapon quality assurance plan to align with recently revised federal policy.
- Participated in product acceptance activities to ensure reliability of products for the stockpile.
- Collaborated with the Weapons Quality Division (NA-121.3) to apply weapons quality assurance requirements for NA-LA integration.
- Developed a briefing to communicate quality assurance policy changes affecting collaboration between the NNSA and the United Kingdom.

Office
NA-LA Los Alamos Field Office

"The fellowship provided me the opportunity to learn about the vast scope of work done across the Nuclear Security Enterprise. Working at a field office gave me unique insight into the complexity of executing a national security mission."

Education
BA, International Relations and Global Studies, Russian East European, and Eurasian Studies, University of Texas at Austin

Emmy Naw
NA-181 Office of Policy and Requirements

Overview

NA-181's Office of Policy and Requirements manages system engineering and program management policies for Defense Programs (DP), integrating top-level requirements from defense agencies down to program specifics. I support the DP Risk Management team which leads and advances DP's integrated risk management approach to enable the nuclear deterrent mission.

Emmy with Nuclear Security Enterprise risk professionals at our governance updates writing workshop.

Outcomes

The outcomes of my team's activities, including leading risk culture surveys, supporting the Federal Integrated Risk Register and supporting risk governance updates, directly lead to a more comprehensive risk management system for Defense Programs. We are building an environment where risks are clearly identified, analyzed, and mitigated, which in turn leads to more predictable program outcomes and better resource allocation.

The impacts of this work are significant for national defense, as clear and integrated requirements lead to risk informed decisions, enhanced efficiency, and improved collaboration among stakeholders. This directly strengthens the safety, security, and effectiveness of national defense initiatives.

Office
NA-181 Office of Policy and Requirements

"This fellowship, within the Defense Programs Risk Management team at NA-181, has given me great insights into the many facets of nuclear security and has also provided invaluable mentorship and exposure to leading experts in national security and risk management."

Education
MS, Information Systems, Syracuse University

Chantel Newsome
NA-NV Nevada Field Office

Overview

The Office of the Assistant Manager for Mission and Infrastructure (AMMI) at the Nevada Field Office (NFO) is crucial for mission execution of high-hazard and nuclear operations, non-nuclear research and development, and strategic partnership programs at the Nevada National Security Sites (NNSS).

Chantel visits the Nuclear Emergency Support Team (NEST) facility in Washington, DC.

Outcomes

My work significantly optimized critical NNSS projects by improving program comprehension through strategic research. I led improvements for the Strategic Partnership Project (SPP) process, which enhanced efficiency from the initial project receipt to its completion.

These combined efforts ensured reliable information for crucial decision-making and strengthened data governance across the program site office.

Office
NA-NV Nevada Field Office

“The fellowship at the field office offered essential mentorship and networking opportunities, delivering key insights into SPP and infrastructure that greatly influenced my career path and equipped me to handle practical challenges.”

Education
MBA, Specialization in Cybersecurity Management and Project Management, University of South Carolina at Aiken

Jake Norris
NA-20 Office of Defense Nuclear Nonproliferation

Overview

The Office of Defense Nuclear Nonproliferation (DNN) Front Office (FO) provides support to the Deputy Administrator for DNN on all policy and action issues. As an NGFP Fellow in the DNN FO, I supported my team members on various assignments. One of the most rewarding assignments was planning and executing a site visit to Oak Ridge National Laboratory (ORNL) and Y-12 for Dr. Matthew Napoli, NNSA Deputy Administrator for Defense Nuclear Nonproliferation (NA-20).

Jake during a site visit to ORNL with NA-20 and NA-2 touring the Mobile Uranium Facility.

Outcomes

I worked with colleagues from DNN program offices, ORNL, and Y-12 lab and field office employees to develop an agenda and synchronize our trip so Dr. Napoli could join NNSA Principal Deputy Administrator Scott Pappano (NA-2) for portions of the tour. This was a successful visit that required me to work diligently with multiple stakeholders. It was a unique and rewarding experience to work on an event from start to finish and see the trip go off without a hitch.

Planning a trip for an NNSA principal tested all the skills I have built up during the fellowship, including networking with different DNN programs to ensure that their equities are displayed and ensuring that lab counterparts can accommodate our preferences.

The multiple tours and meetings were a great experience for everyone to learn more about the capabilities that ORNL and Y-12 provide to NNSA's mission.

Office
NA-20 Office of Defense Nuclear Nonproliferation

"This fellowship has provided me with multiple opportunities to support leaders from across NNSA. Working in the DNN Front Office has been amazing for developing my understanding and capabilities as a new nuclear professional."

Education
MA, International Security, George Mason University
BA, Government and International Relations, George Mason University.

Fernando Patlan
NA-192.5 Lithium Modernization

Overview

The Office of Lithium Modernization leads modernization efforts of lithium capabilities across the Nuclear Security Enterprise. During my fellowship, I supported program activities focused on advancing lithium processing technologies, strengthening coordination between NNSA sites, and improving insight into lifecycle risks affecting critical materials.

Fernando visited the Y-12 National Security Complex and viewed metal being poured out by a chemical operator. Photo shared by Consolidated Nuclear Security.

Outcomes

My work contributed to improved understanding of process needs and modernization pathways for lithium operations. I helped review technical information, assess process gaps, and engage with site partners to support program planning. Through these efforts, I gained a deeper appreciation of how technical, operational, and strategic considerations intersect in sustaining critical national security capabilities.

This fellowship has strengthened my ability to analyze complex technical issues and collaborate across various mission spaces. It allowed me to work closely with technical experts across Y-12 and the national laboratories, gaining firsthand exposure to current modernization challenges and strategies. I had the privilege of being honored twice with my office's Big Box Award for exceptional performance and commitment to mission success.

"The fellowship has allowed me the opportunity to work with experts across the enterprise and provided me insights into how the Nuclear Security Enterprise functions."

Office
NA-192.5 Lithium Modernization

Education
MS, Mechanical Engineering, University of Texas, Rio Grande Valley

Gordon Peters
NA-182 Office of Program Management Support

Overview

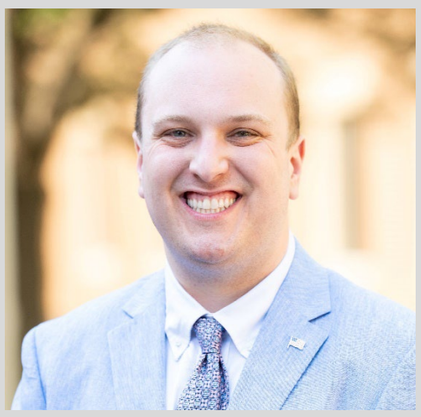
NA-182, Office of Program Management Support, provides credible and relevant support to the wider Defense Programs (NA-10) organization. During my time with NA-182, I worked on projects focused on the Defense Programs Business Process System (DPBPS).

Gordon visits the X-10 Graphite Reactor during a Fellow-led site visit.

Outcomes

While working for NA-182, I, along with multiple stakeholders, spearheaded a project to modernize and update the federal requirements located within DPBPS. This involved the labor-intensive task of going through every federal requirement located within DPBPS and reviewing it for accuracy and effectiveness.

These efforts helped to make federal requirements more clear and easier to follow for all the laboratories, plants, and sites, along with the federal employees who use them on a daily basis.



“The fellowship provided me the opportunity to work hand-in-hand with federal employees to gain in-depth knowledge of how the NNSA and wider Nuclear Security Enterprise operate.”

Office
NA-182 Office of Program Management Support

Education
Master of International Affairs, Texas A&M University

Bryce Purgiel
NA-1.1 Enterprise Planning and Analysis

Overview

I led the NA-1.1 Enterprise Planning team in building a Power BI report and the dataset to underpin it. The output was briefed to the newly-appointed NNSA Administrator (NA-1), Brandon Williams. A follow-on brief to the NNSA Chiefs of Staff was requested by NA-1 due to the quality and strategic implications of this report.

Bryce meets with industry representatives at the NGFP Career Fair.

Outcomes

The role of NA-1.1 traditionally shifts when a new Administrator is appointed because we directly support their unique vision for the enterprise. I contributed substantially to realignment efforts in support of the Strategic Partnerships Projects (SPP) team, the Enterprise Planning team, and the Integration and Analysis team after we welcomed our new Administrator.

As a fully-integrated team member, I helped shape the development of multiple projects within NA-1.1. My work included drafting decision memos for the highest levels of NNSA leadership, editing strategic-level documents for the enterprise, and briefing senior executives.

Office
NA-1.1 Enterprise Planning and Analysis

“Supporting the incredible public servants and contractors at NNSA who work tirelessly to keep our nation safe has reinforced my love for this country and prepared me to serve its people with distinction.”

Education
MA, Nonproliferation and Terrorism Studies, Middlebury Institute of International Studies at Monterey

Luke Radice
NA-211 Office of International Nuclear Security

Overview

From January 11-15, 2026, I traveled to Jordan to support an Office of International Nuclear Security (INS)-facilitated train-the-trainer workshop with national partners from the Jordan Research and Training Reactor and the National Gendarmerie. I also toured the facility and the reactor building to view INS-funded security upgrades and met and discussed ongoing cooperation with site leadership and site security personnel.

Luke with Jordanian partners at the Jordan Research and Training Reactor.

Outcomes

As a result of this workshop, I was able to gain a deeper understanding of the history and context behind INS engagements with our partner nations. Since my return, I have also been engaged in longer-term strategy planning for the future of INS engagement in the country. In addition to my support for the Jordan bilateral portfolio, I have also been tasked with supporting the management of the Middle East and North Africa regional portfolio.

INS works to mitigate the risk of nuclear terrorism abroad, particularly the theft of nuclear materials and the sabotage of nuclear facilities. INS partners with nearly 65 countries around the world, both bilaterally and multilaterally, to achieve this mission.

Office
NA-211 Office of International Nuclear Security

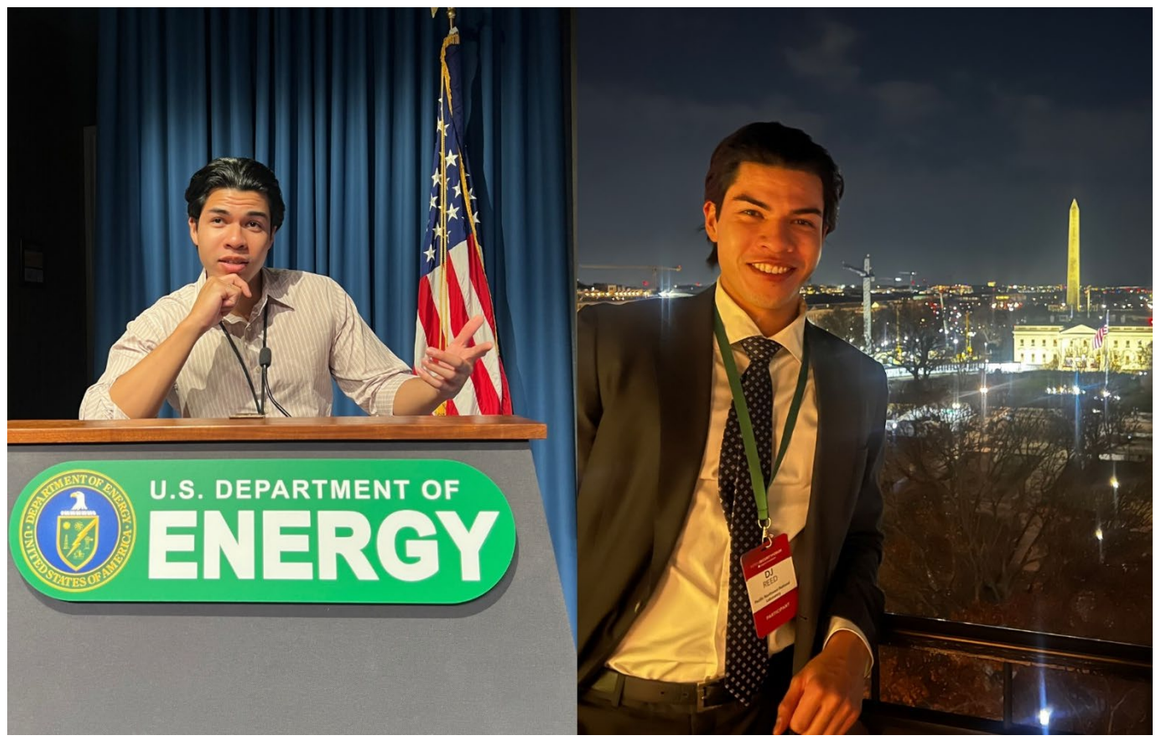
“This fellowship has been nothing short of transformative. It provides incredible hands-on experience supporting a vital national security mission, allows unparalleled access to senior decision-makers, and offers boundless learning opportunities from nuclear security subject matter experts.”

Education
MA, International Relations, Johns Hopkins School of Advanced International Studies

DJ Reed
NA-10 Deputy Administrator's Action Group

Overview

The Deputy Administrator's Action Group (DAAG) delivers executive-level support to the Deputy Administrator for Defense Programs (NA-10) in carrying out NNSA's deterrence mission. The team serves as the primary liaison between NA-10 program offices and a range of internal and external stakeholders, including NNSA Congressional Affairs, the Administrator's office, and the interagency.



DJ setting up an NA-10 All-Hands (left) and attending Aspen Security Forum in DC (right).

Outcomes

As a member of the DAAG, I supported Defense Programs leadership across a variety of program activities and initiatives. This included supporting congressional reports and testimony, briefings for leadership engagements, and reviewing press releases and formal correspondence. I also collaborated with colleagues in the Office of Production Modernization (NA-19) and the Office of International Programs (NA-10.2) which gave me exposure to the full scope of the NA-10 portfolio. Through these experiences, I developed a deeper understanding of how technology, policy, and strategy enable NNSA's critical role in U.S. nuclear deterrence.

"My time with the DAAG, working on issues spanning the nuclear security enterprise, gave me unparalleled insight into the Defense Programs mission and the leaders who drive its success."

Office
NA-10 Deputy Administrator's Action Group

Education
MA, International Security, George Mason University

Marco Savarin
NA-10 Deputy Administrator's Action Group

Overview

The mission of the Deputy Administrator's Action Group (DAAG) is to provide executive level support to the Defense Program's Front Office in carrying out its mission of supporting the Nation's current and future defense posture and necessary nationwide infrastructure of science, technology, engineering, and production capabilities.

Outcomes

The DAAG is dynamic, with activities in various defense and policy-related areas. I provided hands-on support in assisting leadership with executing mission activities related to the Office of Research, Development, Test, and Evaluations (NA-11) and the Office of Stockpile Management (NA-12). In the DAAG, I gained insight into the Defense Programs mission, requirements validation, all associated costs, budget execution, stakeholder interface, and Weapons Activities related travel to NNSA and partner sites.

Marco with an Air Launched Cruise Missile (inert) at the Hazardous Materials Management and Emergency Response (HAMMER) Federal Training Center .

As a DAAG Fellow, I saw firsthand how policy and budget drive program decisions. This role requires a critical thinker that can communicate, analyze, and possess the ability to write effectively–a skillset utilized when reviewing and evaluating programmatic reports and communications documents.

"This fellowship helped me better understand the vast production capabilities needed to develop, field, and maintain the United States' nuclear deterrent. Seeing firsthand the facilities in action that I helped fund as a Congressional staffer was a full circle moment for me."

Office
NA-10 Deputy Administrator's Action Group

Education
MA, International Security, University of Denver
BA, International Relations, Michigan State University

Altan Shapovalov
NA-40 Office of Emergency Management

Overview

I provided critical operational support across NA-40 offices by optimizing existing geospatial datasets and facilitating the streamlined collection, storage, and analysis of critical information for senior leadership.

A view of the Emergency Operations Center from Altan's visit to Lawrence Livermore National Laboratory.

Outcomes

To address critical omissions in our Geographic Information System (GIS) data, I expanded and validated the dataset to include more DOE/NNSA facilities, tripling the number of entries. This provided my office with a complete, highly accurate geospatial tool, significantly enhancing emergency management planning and response reliability.

In support for the Office of Continuity (NA-43), I helped engineer an interactive dashboard that provided senior leadership with real-time site status visibility. This new capability accelerated and optimized enterprise monitoring, ultimately elevating overall operational oversight.

Office
NA-40 Office of Emergency Management

"While college felt more like a time to gather leaflets of knowledge from various trees of science, this fellowship has been a metamorphosis during which I could apply all my accrued skills to grow my wings. As I exit the chrysalis, I am eager to see where the winds take me."

Education
MS, Geography, University of Oregon

Dylan Sharp
NA-SN Sandia Field Office, Safeguards and Security

Overview

The Sandia Field Office, Safeguards and Security, oversees the contractor assurance performance of NA-70 Office of Defense Nuclear Security (DNS) topic areas. I worked on projects for both NA-70 and my field office and deployed an application to all field offices collecting data for NA-70.

Dylan presents a dashboard to the Sandia Field Office leadership.

Outcomes

The Sandia Field Office oversees Sandia National Laboratories, and the sub-office of Safeguards and Security oversees contractor performance in implementing and assessing security related program from NA-70. I helped my field office, sub-office, and NA-70 by providing dashboards and data analysis of federal oversight.

An application I built for NA-70 was adopted and deployed to collect user input from all NNSA sites where it would later feed into a real-time dashboard I developed for them.

Office
NA-SN Sandia Field Office, Safeguards and Security

“I am greatly appreciative for the experience, friendships, and career development provided by the fellowship. It has been an honor to have been a part of the important work of the Nuclear Security Enterprise.”

Education
BA, Psychology, University of North Texas

Jesse Sippel
NA-CI Office of Congressional and Intergovernmental Affairs

Overview

The Office of Congressional and Intergovernmental Affairs effectively communicates, promotes, and defends the mission, goals, and budget of NNSA through proactive outreach and sustainable relationship building with federal, state, tribal, and local audiences. I gained an overarching view of NNSA activities through supporting senior leadership.

United States Capital Building, photo by Jesse Sippel

Outcomes

My primary work included assisting the front office with a wide variety of time sensitive tasks, coordinating activities, tracking internal and external national security engagements for awareness, supporting senior staff with agency wide initiatives, and briefing senior office leadership on events and legislative research. My work contributed to strengthening the office and improving efficiency.

Additionally, I had ample opportunities to build vital relationships throughout the nuclear security enterprise, which greatly aided my professional development and provided enlightening perspectives on the world.

Office
NA-CI Office of Congressional and Intergovernmental Affairs

“The NGFP Fellowship has definitively altered the path of my career and has offered a unique opportunity to meet and work alongside some truly exceptional individuals, to which I am forever grateful and wish the best for all who have been kind alongside my journey.”

Education
BA, Political Science, Binghamton University
BA, Economics, Binghamton University

Zach Slotkin
NA-232 Office of Nuclear Material Removal and Elimination

Overview

The Office of Nuclear Material Removal and Elimination seeks to eliminate inventories of weapons-usable nuclear materials around the world. My biggest project was supporting the Nuclear Infrastructure Threat Reduction (NITR) program, which partners with foreign nuclear facilities to dismantle or irreversibly disable sensitive nuclear infrastructure.

Zach visits a research reactor outside Belgrade, Serbia.

Outcomes

I worked closely with the NITR program manager, lab personnel, and representatives of NITR's two pilot partners, Portugal and Serbia. I led weekly meetings with the lab team and support the communication with foreign partners. These engagements culminated in a site visit to the Vinča Nuclear Institute in Serbia, where I worked with the team to survey target infrastructure and map out project requirements.

I also helped chart the long-term growth of the NITR program by developing a partner selection rubric, updating our milestone timeline, and brainstorming new ways to measure success. After using it to narrow our list of potential future partners to three target countries, I presented the rubric to the Assistant Deputy Administrator and developed an outreach plan for the countries we selected. My efforts helped lay the groundwork for the program's expansion.

Office
NA-232 Office of Nuclear Material Removal and Elimination

"The fellowship taught me how U.S. nonproliferation objectives translate into action, preparing me for a career in public service and national security."

Education
MS, Foreign Service, Georgetown University

Jackson Stanley
NA-241 Office of International Nuclear Safeguards

Overview

The Office of International Nuclear Safeguards provides American leadership at the International Atomic Energy Agency (IAEA) to ensure that partner states implement and meet international safeguards obligations. I worked on projects and served as a technical reviewer with a focus on gas centrifuge enrichment plants.

Jackson supported the Single-Use Destructive Assay (SUDA) project under SGTech.

Outcomes

I primarily spent my fellowship in support of the Safeguards Technology (SGTech) Program overseeing the development, testing, and transfer of more efficient and cost-effective safeguard tools, technologies, and methods to the IAEA. In addition, I was the point of contact on the fusion nonproliferation portfolio and a bulk pebble bed enrichment validation project.

These efforts help to verify a country is compliant with its legal agreements with the IAEA and not diverting nuclear material to weapons programs or pursuing undeclared nuclear activities.

“This fellowship has allowed me to make significant contributions to projects in support of international safeguards. It has greatly enhanced my research and has made me a better engineer.”

Office
NA-241 Office of International Nuclear Safeguards

Education
PhD (In Progress), Nuclear Engineering, University of Tennessee, Knoxville

Akhila Vemuri
NA-121.2 Office of Production Operations

Overview

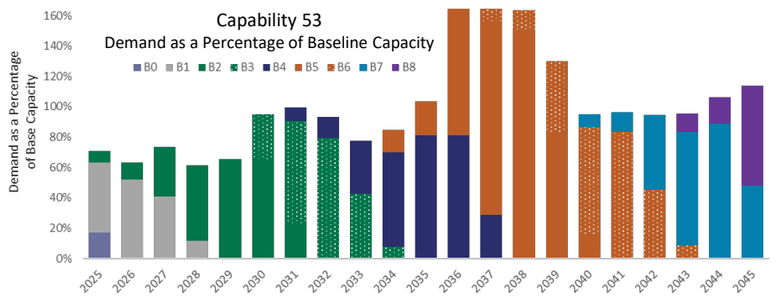
Production Operations (PO) maintains the core cross-cutting capabilities at each site to meet their production mission for NNSA's nuclear weapons (weapon modernization, sustainment, dismantlement and disposition, and strategic material programs). PO's scope enables all aspects of weapons production. I have been given the unique opportunity to see how each of Defense Program's (DP) capabilities fit together and even build models to forecast capabilities and capacities required to execute our mission.

Fellow-led trip to the National Ignition Facility.

Outcomes

The Modeling, Analysis and Projections (MA&P) portfolio is part of the PO Division and supports decision-making and enterprise-wide planning. I worked mainly with the Enterprise Capacity Analysis (ECA) model which provides high-level, quick-turn analysis of production capacities against stockpile demand scenarios.

Throughout my fellowship, I worked on key presentations that helped highlight the importance of our tools that were presented to senior leadership. I also worked on deploying our ECA tool as a dashboarding system so that our team and DP senior leadership can access the model via a deployable web interface on the Enterprise Secure Network.



Capability Utilization (baseline = 100%)	FY															
Capability	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Capability Group: 51-55																
Capability 51	74%	56%	63%	50%	52%	72%	85%	44%	39%	36%	46%	66%	70%	67%	57%	43%
Capability 53	71%	63%	74%	62%	65%	95%	100%	93%	78%	85%	103%	164%	164%	163%	130%	95%
Capability 54	74%	56%	63%	50%	52%	72%	85%	78%	27%	25%	32%	47%	49%	47%	40%	30%
Capability 55	85%	50%	56%	43%	46%	46%	86%	69%	72%	46%	72%	76%	118%	104%	106%	67%

Example unclassified outputs for ECA model

Office
NA-121.2 Office of Production Operations

"This fellowship gave me insight into the inner workings of the enterprise and how headquarters interacts with the labs, plants, and sites. I have been able to create a strong network at headquarters and at the labs, and this experience has been invaluable."

Education
MS, Data Science and International Economics, American University

Kaley Walker
NA-242 Office of Nuclear Export Controls–Export Control Review and Compliance/Interdiction

Overview

NA-242's Export Control Review and Compliance/Interdiction (ECRC/I) program has a strategic goal to detect and prevent illicit transfers of WMD-related materials. I reviewed foreign engagement proposals to ensure NNSA's laboratory complex complies with export control regulations throughout their engagements with international entities. My other work included reviewing dual-use export license applications and evaluating export control touchpoints with the other DOE offices and the U.S. interagency.

Outcomes

ECRC/I supports anticipatory export control programs to secure U.S. strategic advantage in emerging technologies. The DOE Committee on Foreign Investment in the United States (CFIUS) team assures private-sector partnerships do not have adverse impacts on NNSA's Defense Programs. I identified a CFIUS case that could have interfered with supplies for the NA-242-led Microelectronics Export Control (MEC) capability. This helped

NGFP Fellows hold a nuclear fuel rod in front of the Penn State University Breazeale Research Reactor during a tour in October.

the ECRC/I Federal Project Manager for CFIUS engagements begin discussions for a system to identify private-sector activities that would affect supplies for MEC emerging technology research in the future. Additionally, as a fellow, I grew from executing foreign engagement reviews and preparing export control compliance recommendations for DOE laboratories to reviewing export license applications as a First Sign-off Officer. As such, I recommended adjudication positions to the federal licensing officer.

Office
NA-242 Office of Nuclear Export Controls–Export Control Review and Compliance/Interdiction

"The fellowship gave me countless opportunities to participate in diverse intra-DOE and interagency engagements at high levels. The only things I will cherish more than the once-in-a-lifetime experiences are the connections and friends I have made through the program."

Education
Master of International Policy, University of Georgia

Jordan Wolken
NA-191 Office of Plutonium Pit Production Modernization

Pacific Northwest NATIONAL LABORATORY

National Nuclear Security Administration

Overview

As a Fellow with NA-191, I supported the program management and modernization efforts enabling the reestablishment of plutonium pit production activities across the Nuclear Security Enterprise. My work focused on supporting the coordination of pit production activities at Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and the Nevada National Security Sites.

Jordan and other Fellows visit the Nuclear Emergency Support Team (NEST) facilities at Joint Base Andrews.

Outcomes

In my fellowship, I contributed to the management of programs supporting pit production recapitalization and infrastructure modernization. This included supporting capital line-items and equipment procurement at Los Alamos National Laboratory, as well as assisting in the Glovebox Enhanced Capabilities project at the Nevada National Security Sites.

Through budget review/analysis and white paper development, I helped strengthen resource justification efforts and improved program visibility for federal leadership. My role supported NA-191's mission to deliver a resilient pit production capability critical to stockpile modernization and national security.

"The fellowship transformed my understanding of how national security missions are executed at the federal level, and it strengthened my ability to bridge technical expertise with strategic program management."

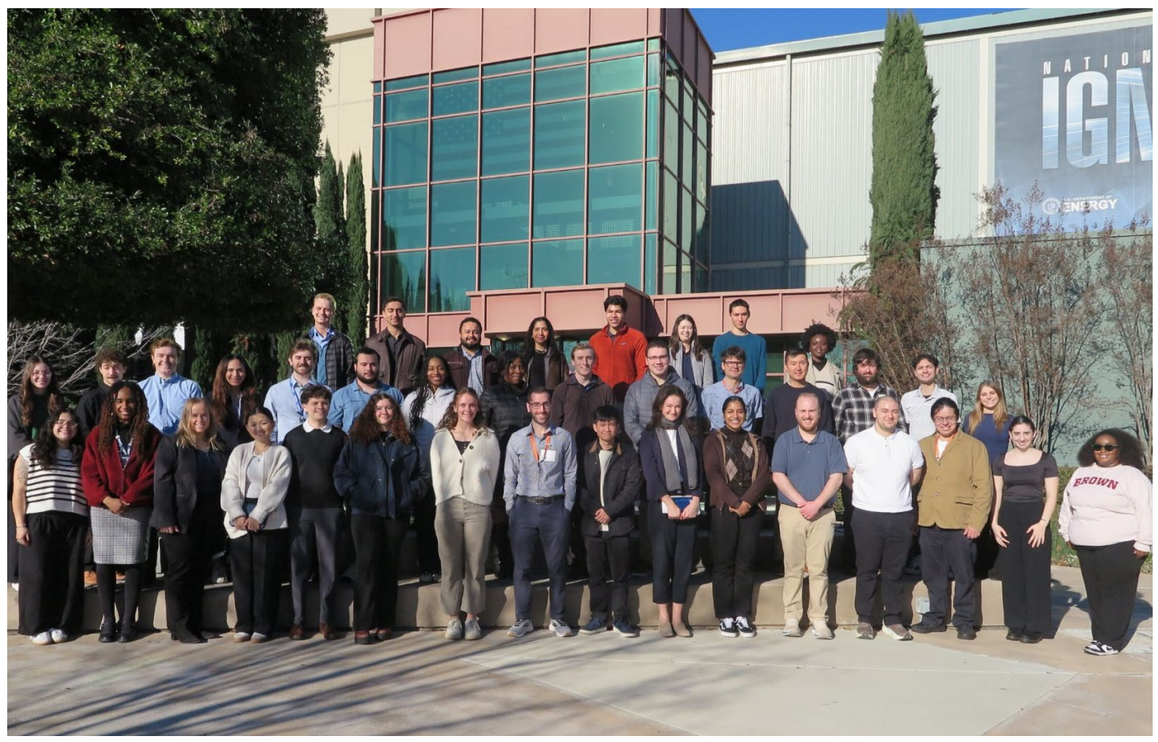
Office
NA-191 Office of Plutonium Pit Production Modernization

Education
MSc, Particle and Nuclear Physics, University of Edinburgh

Natasha Wood
NA-243 Office of Nuclear Verification

Overview

During my fellowship, I worked on NA-243's Weapons Monitoring and Verification program and the Nuclear Materials Verification program. Specifically, I supported two mission areas: Verification Approaches and the Seismic Cooperation Program.



NGFP fellows at the National Ignition Facility a Lawrence Livermore National Laboratory (LLNL).

Outcomes

As a program analyst for the Verification Approaches portfolio, I worked closely with lab partners to revise NA-243's documents which overview technical approaches to meet a range of potential monitoring and verification mission objectives. As part of the Seismic Cooperation Team, I supported efforts to strengthen seismic monitoring in the Caucasus and Central Asia.

- Co-organized a fellowship trip to LLNL for 40+ fellows and interns
- Served as Action Officer for a quarterly Defense Threat Reduction Agency-NNSA meeting
- Developed mock FY28 budget for the Office of Nonproliferation and Arms Control
- Updated, re-wrote NA-243 briefing materials to improve clarity, concision

Office
NA-243 Office of Nuclear Verification

"Work hard and be kind. I have been incredibly lucky to be in a cohort and support a team that embody this ethos. Inspired by NGFP, I look forward to bringing the same work ethic and attitude into the next step of my career."

Education
MA, International Security and Technology Policy, The Fletcher School at Tufts University
BA, Spanish, University of Pennsylvania

Eleni Zervos
NA-12 Office of Stockpile Management

Overview

The Office of Stockpile Management is responsible for directing and overseeing all stockpile production, operations, and modernization activities to ensure the U.S. nuclear weapon stockpile remains safe, secure, and reliable throughout the Nuclear Security Enterprise (NSE).

Eleni and the NA-12 Front Office supports a stockpile modernization briefing on Capitol Hill.

Outcomes

Comprised of four individuals, the NA-12 Front Office core team provides critical support to program leadership. Our responsibilities include tracking and reviewing taskers, drafting talking points, facilitating meeting preparation, and coordinating deliverables for 13 diverse portfolios. We maintain regular communication and collaboration with other divisions within Defense Programs (DP).

This experience allowed me to contribute to critical assignments that covered a broad spectrum of topics, including rapid capabilities, Hard and Deeply Buried Targets (HDBT), enriched uranium, and pit production. My efforts directly supported DP policymakers by providing essential information for informed decision-making.

Office
NA-12 Office of Stockpile Management

“This fellowship helps recent graduates gain experience in the NSE and pursue their interests in nuclear policy, both through Defense Programs or Non-Proliferation. It allowed me to learn more about nuclear security and make friends along the way!”

Education
MS, Foreign Service, Georgetown University
BA, International Relations and Modern History, University of St. Andrews