What Fellows Have to Say about NGFP

...enhanced my knowledge of nonproliferation research occurring across the national laboratories and universities

...provided me a unique perspective on how the federal government works and how scientists can contribute to shaping national policy

...invaluable in my understanding of the issues the United States faces domestically and internationally in regard to the stockpile and proliferation

...experience in the federal budget process and how a federal agency interacts with Congress to accomplish their mission

...meaningful, long-term work assignments that varied from individual analysis to coordinating projects with members from all NNSA sites

...helped me understand the relationship between cutting-edge research at the national labs and the government agencies like NNSA

...learn and get deeply involved in the government contracting and acquisition process, leadership programs, and project management

...improved my professional knowledge of radiation safety and how it is implemented effectively across the NNSA

Cover Photo


Middle row from the left: Daniel Custead, Jessica Jagmin Brookins, Andrew Cartas, William Gordon, Dana Jespersen, Lance Garrison, Matt Deal, Corey Smith, Tracey-Ann Wellington, Madeleine Faubert, Jason Portner, Elizabeth Lostracco, David (Kyle) Fowler.

Leaders for Tomorrow’s Security Challenges

Since its inception in 1995, the National Nuclear Security Administration (NNSA) Graduate Fellowship Program (NGFP) has played an integral role in shaping future leaders for U.S. national security. The program has been successful in training, educating, and building a vibrant network of professionals eager to tackle the latest challenges in nuclear security. The NGFP Class of 2015-2016 arrived ready to serve and contribute across the broad spectrum of the nuclear security enterprise.

In 2016, we welcomed 39 fellows, the largest class to date, to the nuclear security team. During the year the fellows gained hands-on experience across the NNSA mission space, ranging from nonproliferation and stockpile stewardship to infrastructure and risk management, and other diverse areas. In supporting the nuclear security mission, the Class of 2015-2016 worked directly with and in program and site offices across the country. Through interactions with NNSA leaders and workforce, the fellows grew as leaders and helped to shape the future of nuclear security efforts for both technology and policy. Together, and individually, the class participated in a year filled with specialized training, professional development, and key networking skills that set the foundation for diverse and exciting career opportunities. As an example of the breadth across the program’s broader nuclear security community, this year’s class also included two fellows placed at the Department of State.

Upon completing their fellowships, the Class of 2015-2016 joined the more than 300 alumni who have already completed the program. Nearly 80% of the class accepted positions within DOE and NNSA, with fellows transitioning into roles in the national security arena. Graduates from this program have made, and continue to make, vital contributions across the nuclear security realm. As we look to the future, we continue to evolve the program to better meet mission needs to make the training experience and leadership development meaningful for future leaders and experts.

I would like to personally thank the Class of 2015-2016 as well as all of our NGFP alumni for numerous contributions to the mission. Our nation’s security and safety needs highly motivated and qualified individuals, such as our fellows, to lead the next generation of policy and technical experts in addressing and solving important national security challenges. The commitment to embrace service is noteworthy. I look forward to the fellows’ future endeavors and contributions to critical mission challenges.

R. M. Hendrickson
National Nuclear Security Administration
Associate Administrator for Management and Budget

Mission Focused – Empowered Workforce – Service Oriented
Summary

The NGFP mission is to attract and develop exceptional next-generation leaders in nuclear security and nonproliferation. To advance this mission, NGFP manages an integrated suite of activities to train and engage the best and brightest graduate-level students from top-tier universities across the nation.

This annual report covers program activities for the Class of 2015-2016, from outreach in spring of 2014 through assignments that began in June 2015 and ended in June 2016. Significant accomplishments for the Class of 2015-2016 included:

- **Outreach & Recruitment.** NGFP received more than 210 highly qualified candidate applications.

- **Selection & Hiring.** The class included 39 graduate-level students from 27 top universities around the globe. This class welcomed a strong balance of technical, policy, and business backgrounds as well as a number of “hybrid students” (having an undergraduate degree in one category but finishing a graduate degree in another).

- **Placements.** The fellows were hired for positions with 32 different program and site offices across the NNSA as well as the Department of State.

- **Value to NNSA.** Fellows made significant contributions in areas of policy, technology, and program management. They assisted in crucial business operations, conducted security analyses, worked directly with representatives in the United States and partner countries to inform essential decision-making, developed and presented at high-level workshops and conferences, and cultivated significant international engagements.

- **Career Development.** NGFP hosted six program-wide career development and networking events, including briefings with the House Armed Services Committee, Rear Admiral Hendrickson, and other leaders from across the nuclear security community.

- **Advancing the Mission.** By the end of the fellowship term, 79% of the fellows were retained in positions throughout the DOE and NNSA complex, including DOE National Laboratories, with the remaining fellows taking the NNSA perspective with them to other mission-aligned agencies and private industry.

- **Looking Forward.** The incoming Class of 2016-2017 will be the largest class to date. The class comprises 49 fellows, with approximately 45% STEM and 55% policy/operations/business backgrounds, placed across 41 program and site offices, including one fellow placed at the Department of State.

This report as well as more information about NGFP is available at [http://ngfp.pnnl.gov](http://ngfp.pnnl.gov).
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PACIFIC NORTHWEST NATIONAL LABORATORY

operated by

BATTELLE

for the

UNITED STATES DEPARTMENT OF ENERGY

under Contract DE-AC05-76RL01830
About the Program

Overview

NGFP cultivates future leaders in nuclear security and nonproliferation. Through NGFP, outstanding graduate students with career interests in nuclear security are appointed to program offices across NNSA (and with the Department of State). During their one-year assignment, fellows contribute to a variety of programs that advance NNSA’s mission to maintain our nation’s nuclear weapons stockpile without nuclear testing, reduce global danger from weapons of mass destruction, and respond to nuclear and radiological emergencies.

Organization

NGFP is managed through NNSA’s Office of Management and Budget and administered by Pacific Northwest National Laboratory (PNNL), with roles shown in the organizational chart.

Annual Lifecycle

NGFP’s annual lifecycle involves simultaneous planning, administration, and implementation of three different fellowship classes: onboarding and administrating the current class of fellows, recruiting and hiring the next class, and recruitment planning for the future class.
Responsibilities

The NGFP Federal and PNNL Program Managers share a unified, best-in-class approach based on a common vision and framework that is organized into five program elements, as shown in the figures below. These program elements occur concurrently throughout the year as NGFP recruits the future class, onboards the incoming class, and manages the outgoing class.

Program Responsibilities

- Overseeing all aspects of the program, including the budget, strategy, stakeholder engagement, implementation, evaluation, issue resolution, improvements, and reporting.

- Developing and implementing an outreach strategy to meet program objectives. This includes conducting an annual NNSA hiring needs assessment, partnering with NNSA offices requesting fellows, partnering with universities and professional associations for outreach, working closely with prospective candidates to facilitate the application process, and maintaining the online application system.

- Preparing applications for review by NNSA offices and sites, preparing for and facilitating NNSA interviewing and hiring, and overseeing fellows’ security clearance processing.

- Conducting an extensive orientation to prepare fellows for their assignments and roles in the federal environment.

- Introducing the fellows to career growth opportunities through interactive sessions with professionals in the nuclear security field.

Program Management

Recruitment

Selection & Hiring

Orientation & Training

Career Development

Class of 2015-2016

NNSA Graduate Fellowship Program Annual Report
Class of 2015-2016

NGFP executes a strategic outreach and hiring plan that ensures the best possible candidates are recruited to achieve program goals aligned to NNSA mission needs. As needs evolve, so does NGFP’s approach. NGFP recruiters and program managers work with NNSA to evolve outreach and hiring efforts to serve the full breadth of NNSA mission and mission-support areas including nonproliferation, defense programs, counterterrorism and counterproliferation, nuclear safety and health, site operations and infrastructure, and other critical mission-support functions.

As directed by the NGFP Federal Program Manager, fellows are hired as employees of Battelle, the independent research organization that operates PNNL for DOE. PNNL administers all pre-employment and employment activities, including pre-interview background checks, required drug testing, facilitation of security clearance processing, and interview facilitation for NNSA. Hired fellows enter their positions with all of their employment details and benefits in place, enabling them to immediately focus on their new assignments.

Outreach and Hiring

NGFP engages program offices to determine hiring needs and leverage connections at established partner universities and professional associations. NGFP recruitment specialists rely on a variety of methods, including on-campus recruiting events, online and virtual outreach, and strategic connections through former fellows, current program stakeholders, and various professional and student organizations. For the Class of 2015-2016, NGFP sought to secure a quality pool of candidates for what was the largest class to date at the time.

University Partnerships

The hallmark of the NGFP recruitment strategy is strong relationships with partner universities. For the Class of 2015-2016, NGFP established an outreach list of 125 programs and disciplines from 48 key university partners. Throughout the year, NGFP recruiters participated in or led more than 60 events during university visits, including more than 100 separate recruitment presentations. On-campus visits included varying combinations of information sessions, career fairs, in-class presentations, and diversity outreach.

Online Outreach

NGFP recruiters work hard to build and maintain a presence at universities through virtual means such as university and organizational job boards, sending program information to faculty, and utilizing alumni networks. Virtual outreach accounts for a significant portion of applicants (usually about 30%). The NGFP website is updated regularly to provide current information and guidance throughout the application process.

For the Class of 2015-2016, in addition to the on-campus recruitment, NGFP targeted more than 40 universities for virtual outreach and altogether engaged more than 100 different programs at universities and professional associations. NGFP’s presence was established and managed on these university websites and listservs to raise awareness while controlling costs.

Results

A total of 214 applications were completed for the Class of 2015-2016. The applicant pool consisted of a greater percentage of technical candidates than ever before. This includes a growing number of “hybrid students,” or candidates who have an undergraduate degree in one category but are finishing a graduate degree in another (such as a bachelor’s degree in nuclear engineering followed by a master’s degree in international security policy).

Being able to choose the most promising interviewees from a pool of already high-quality candidates means that program offices receive the top candidates.
The Class of 2015-2016 came from universities around the globe.

For the Class of 2015-2016, program offices selected 106 candidates for interview, or approximately 50% of the total applications. Thirty-five program and site offices and the Department of State conducted 253 interviews over a two-week period through a combination of in-person interviews, videoconferencing, and teleconferences. Videoconferencing continues to be a positive and efficient option to accommodate interviewers and interviewees at multiple geographic locations.

After the offices selected their hiring choices, the NGFP Federal and PNNL Program Managers worked with offices to align candidates with mission areas for a total of 38 fellows hired. Additionally, Daniel Sharp, a fellow from the Class of 2014-2015, returned from active duty recall in the U.S. Navy and joined the class to complete his fellowship. The Class of 2015-2016 welcomed students from diverse backgrounds: 41% of the fellows had a technical undergraduate and/or graduate degree; 59% had an academic combination of public policy, international affairs, public administration, or related fields.

The Class of 2015-2016 fellows hailed from the following universities:

- American University
- Cambridge College (UK)
- Columbia University
- Dublin City University (Ireland)
- Georgetown University
- Georgia Institute of Technology
- Harvard University
- Indiana University
- Johns Hopkins School of Advanced International Studies
- Johns Hopkins University
- Marquette University
- Monterey Institute of International studies
- Oregon State University
- Purdue University
- Texas A&M University
- Texas A&M University, Commerce
- University College London (UK)
- University of Denver
- University of Florida
- University of Georgia
- University of Kentucky
- University of Maryland
- University of Tennessee
- University of Texas, Austin
- University of Texas, El Paso
- University of Washington
- Washington State University
Assignments

Program offices carefully select fellows whose combination of academic backgrounds, skills, and experience can make the most significant contributions to their mission areas.

The 39 participants selected for the Class of 2015-2016 boasted the following statistics:

- Placement across 32 different program and site offices, including the Department of State
- Eight Ph.D. candidates as well as advanced degrees spanning the technology and policy spectrum, including:
  - Nuclear Engineering, Mechanical Engineering Radiation Engineering, Physics, Nuclear Physics, Health Physics, Nuclear Nonproliferation, Nuclear Energy, Environmental Science, and Energy Science.
- Proficiency in Mandarin, French, Arabic, Russian, Chinese, Korean, and Spanish.
- Previous experience with the DOE, Department of Homeland Security, Department of State, Department of Treasury, International Atomic Energy Agency (IAEA), NNSA Office of Defense Nuclear Nonproliferation (DNN), and the NNSA Office of Defense Programs, as well as the Pacific Northwest, Idaho, Los Alamos, and Oak Ridge National Laboratories.

Individual biographies for the Class of 2015-2016 are provided in the Appendix. Fellows and their assigned program office include:

- **Daniel Custead**, NA-191 Office of Defense Programs Delivery Systems
- **Matt Deal**, NA-142 Office of Strategic Planning
- **Emily Eng**, NA-211 Office of International Nuclear Security
- **Madeleine Faubert**, NA-00-LAFO Los Alamos Field Office
- **Phillip Forsberg**, NA-143 Office of Strategic Planning & Cost Estimation
- **Lance Garrison**, NA-22 Nuclear Nonproliferation Research & Development
- **William Gordon**, NA-513 Office of Worker Safety & Health Services
- **Thomas Gray**, NA-20-FO Office of Defense Nuclear Nonproliferation
- **Orrin Hasal**, NA-APM-DC Office of Acquisitions & Project Management
- **Jessica Jagmin Brookins**, NA-232 Office of Nuclear Material Removal
- **Dana Jespersen**, NA-00-SRFO Savannah River Field Office
- **Krystal Kasal**, NA-113 Office of Defense Programs Research & Development
- **Elizabeth Lostracco**, NA-212 Office of Radiological Security
- **Christopher McGuire**, Bureau of Arms Control, Verification & Compliance (AVC), Office of Multilateral and Nuclear Affairs
- **Joshua Merritt**, NA-141 Office of Strategic Planning
- **Adam Myers**, DOE-IN-15 Office of Counterintelligence
- **Sarah Norris**, NA-21 Office of Global Material Security
- **R. Ty Otto**, NA-241 Office of International Nuclear Safeguards
- **Kaitlin Oujo**, NA-213 Office of Nuclear Smuggling Detection & Deterrence
- **Valerie Pacer**, DOS-AVC-SSD State Department and AVC Strategic Stability & Deterrence
- **Jessica Paul**, NA-22 Nuclear Nonproliferation Research & Development
Orientation and Career Development

NGFP provides fellows with career development opportunities throughout the year, including an in-depth orientation as well as conferences, career development seminars, and networking events. The agenda continuously evolves to reflect NNSA’s mission needs and fellows’ feedback.

The Class of 2015-2016 participated in the following career development opportunities during their assignments.

- **Orientation.** The fellows began their fellowships with an in-depth orientation designed to introduce them to NGFP, NNSA, and DOE, as well as to their cohort. Fellows spent six days at PNNL in Richland, Washington, where they completed employee training for working in the federal government environment, in-depth NNSA briefings, historical tours of the DOE Hanford Site, hands-on demonstrations, social and networking events, and a mock congressional hearing. Orientation concluded with a day and a half at NNSA Headquarters in Washington, D.C., before fellows deployed to their assignments.

- **Brownbags.** Throughout the year, fellows are invited to meet with NNSA leadership to learn more about NNSA missions and professional growth opportunities. Additionally, fellows hosted brownbags with their colleagues to share information about their program offices, assignments, and topical areas of interest.

  “The brownbag lunches were useful in understanding the full breadth of activities at the NNSA.”

  — NGFP Fellow

- **House Armed Services Committee (HASC) briefing.** Fellows attended a career development session with representatives from the HASC in Washington D.C. where they learned about the role of the HASC and how the HASC and NNSA work together.

  “The HASC briefing provided me information I would not normally acquire in my position. Hearing from the staff member with an engineering background [demonstrated to] me that there are more opportunities available in my future career.”

  — NGFP Fellow

- **National Laboratory Roundtable.** Representatives from four DOE National Laboratories as well as from across DOE’s national security complex joined the fellows to discuss how the laboratories support the NNSA mission and national security and the related career opportunities that are available.

  “The panel of representatives from the different laboratories was an excellent networking opportunity that I found especially helpful.”

  — NGFP Fellow

- **Career Skills Workshop.** At the annual career event, fellows learned practical guidance and best practices for applying to positions after their fellowships. Fellows learned about what to expect when applying for federal positions, resources for working with national laboratories, and general information about federal positions and hiring processes. The event welcomed guest speakers including NNSA Deputy Associate Administrator for Management Frank Lowery, who shared
information about federal hiring and the USAJobs job portal; PNNL Director of Talent Acquisition Rob Dromgoole, who provided guidance for writing résumés and preparing for interviews; PNNL NGFP Operations Lead Ryan Boscow, who shared advice on how best to pursue positions in the federal government and the national laboratories; and PNNL Technical Recruiter Colin Sanders, who shared tips for using LinkedIn and other social networking tools to assist in career searches.

- **Alumni Roundtable.** Current and former fellows came together with leaders from across NNSA, DOE National Laboratories, and the nuclear security enterprise to share their experiences. Notable guests included Lieutenant General Frank Klotz, DOE Under Secretary for Nuclear Security and NNSA Administrator, and Rear Admiral Hendrickson. The fellows also attended a roundtable hosted by Lt. Gen. Klotz, who discussed modern nuclear security challenges and the value fellows bring to the future of NNSA.

- **Closing Ceremony.** To celebrate the completion of the Class of 2015-2016, the closing ceremony welcomed guest speakers Rear Admiral Hendrickson and Phil Calbos, NNSA Principal Assistant Deputy Administrator, Defense Programs. Also in attendance were key leaders from across the nuclear security enterprise, including Madelyn Creedon, NNSA Principal Deputy Administrator, and Colonel Tom Summers, DOE/NNSA Research, Development, Testing & Military Application. Fellows shared posters highlighting their accomplishments from throughout the year.

**"Tours of the laboratory and production sites not only helped me to better understand the programs I would be supporting, but it brought the entire fellowship full circle when I got to see the work in the laboratory and production floor setting."**

— NGFP Fellow

**“The NGFP Career Skills Workshop was especially useful since I gained new insight into the NNSA/federal hiring process as well as how to better tailor my social media presence.”**

— NGFP Fellow

Fellows at the annual NGFP Career Skills Workshop, where they met with NNSA and PNNL leaders to gain practical guidance and best practices for applying to positions after their fellowships.

Photo Credit: Ken Shipp/DOE Photo
Class of 2015-2016

Lieutenant General Frank Klotz, DOE Under Secretary for Nuclear Security and NNSA Administrator, meets with the Class of 2015-2016 at the 2016 NGFP Alumni Forum.

Rear Admiral Randall Hendrickson, NNSA Associate Administrator for Management and Budget, meets with the Class of 2015-2016.


Fellows with PNNL Laboratory Director Steve Ashby and Rear Admiral Randall Hendrickson
Fellowship Highlights

NGFP builds the next generation of leaders in nuclear security by providing hands-on experience in NNSA mission areas across policy, technology, and program management disciplines. The following are highlights from fellows’ assignments.

• **Ian Andrews** wrote a piece of software that will help improve the quality of data used by NNSA to determine the overall state of its infrastructure and assess where greater investment is needed.

• **Benjamin Briese** conducted acceptance testing of newly installed radiation portal monitors and made assurance visits to improve partner capacity.

• **Andrew Brown** supported intra- and interagency coordination for the 2016 Nuclear Security Summit to showcase DOE/NNSA’s accomplishments and drive future international cooperation to enable permanent threat reduction.

• **Bonnie Canion** created new and improved templates for technology fact sheets used to succinctly describe a state-of-the-art research project.

• **Andrew Cartas** contributed significantly to the development of a high-visibility event that will serve to demonstrate U.S. support for the Comprehensive Nuclear Test-Ban Treaty.

• **Elsa Castillo** coordinated the activities to document the LLNL B865A historic building as a Historic American Engineering Record to be archived in the Library of Congress.

• **Daniel Custead** coordinated NA-19 input to the Stockpile Stewardship Management Plan, including collecting and editing narratives written by subject matter experts and program managers.

• **Matt Deal** supported the NA-142 office at the nexus of budgetary and legal work.

• **Emily Eng** supported the Office of International Security in working with Kazakhstan to develop a Nuclear Security Training Center.

• **Madeleine Faubert** was instrumental in working with the Field Office Chief of Staff to develop corrective action plans and other high-visibility plans commended by the Field Office.

• **Phillip Forsberg** conducted a historical infrastructure analysis for Defense Programs and coordinated the Cost Estimating Analysis Group and the Cost Estimating Community of Practice.

• **D. Kyle Fowler** coordinated with site and headquarters representatives to develop a high explosives infrastructure strategy that will influence future investments.

• **Lance Garrison** supported the applicant selection process for the award of the Consortium for Nuclear Science and Engineering in Nonproliferation Research, a $25-million grant over five years awarded to a Berkeley-led consortium of eight universities and five partnering DOE laboratories.

• **William Gordon** contributed to the Chief of Defense Nuclear Safety field office reviews and trained as an accident investigator on the products of the Nuclear Security Enterprise to perform safety oversight.
• **Thomas Gray** was awarded the first DNN fellowship in honor of the late Ian Hutcheon, a longtime nuclear forensics expert at Lawrence Livermore National Laboratory.

• **Dana Jespersen** completed a drug-free workplace assessment of a contractor and presented her findings to senior management. The data and the findings led to an overhaul of the program for the contractor.

• **Krystal Kasal** was key in moving the Matter Radiation Interactions in Extremes project to the Critical Decision Phase, including editing the Program Requirements Document and Mission Needs Statement.

• **Elizabeth Lostracco** played a key role in organizing and planning the Cyber Security Working Group’s quarterly meetings as well as in organizing the Office of Radiological Security’s Annual Program Review/Lessons Learned Workshop that welcomed more than 100 participants from contracting organizations, interagency partners, and NNSA Headquarters staff.

• **Christopher McGuire** organized the International Partnership for Nuclear Disarmament Verification working group meetings in Geneva, which featured more than 80 experts from more than 20 countries.

• **Sarah McPhee** coordinated logistics of the 5th U.S.-India Working Group, which engaged nearly 50 interagency and industry participants and addressed liability and insurance issues facing the Indian government as it seeks inclusion in the Nuclear Suppliers Group.

• **Joshua Merritt** had a lead role in the development and execution of Analysis of Alternatives within Defense Programs.

• **Adam Myers** wrote two Economic Intelligence Briefs that were distributed to policy makers at the top levels of government.
• Sarah Norris wrote, managed, and compiled deliverables related to nuclear/radiological security and counter nuclear smuggling and guided development of and reporting on budget and program metrics.

• Valerie Pacer served as an integral member of the backstopping team and U.S. delegation implementing the New START Treaty with the Russian Federation.

• Jessica Paul initiated a new agreement with the Government of Argentina to conduct work in nuclear forensics and also helped with the lead-up to the Nuclear Security Summit.

• Ty Otto participated in a bilateral coordinating meeting between NNSA and the Republic of Korea’s Nuclear Safety and Security Commission, which focused on planning and reviewing cooperative activities in nuclear safeguards and nuclear security.

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• Ty Otto participated in a bilateral coordinating meeting between NNSA and the Republic of Korea’s Nuclear Safety and Security Commission, which focused on planning and reviewing cooperative activities in nuclear safeguards and nuclear security.
- **Daniel Sharp** returned to NGFP after a year-long deployment with the U.S. Navy. During his fellowship, he created a synchronization briefing for Air Force general officers covering all areas of stockpile management.

- **Bryan Sims** updated the Inertial Confinement Fusion: Priority Research Directions with newly defined performance metrics and an updated narrative discussing major programmatic challenges, which better equipped headquarters to make decisions regarding this portfolio.

- **Corey Smith** completed a rotation at NNSA Production Office Y-12, where he was actively engaged by the Safeguards and Security team and began supporting Nuclear Material Control and Accountability and physical security oversight activities at the plant.

- **Temica Stewart** supported the award of contracts with government agencies and civilian organizations and a multitude of short-term/long-term contractual obligations.

- **Tracey-Ann Wellington** conducted more than 220 nuclear and missile technical reviews of export licenses and requests for dual-use commodities.

- **Ronnie Williams** contributed to the award of several interagency agreements, including a 5-year interagency agreement between NNSA and another federal agency that encompassed an overall award value of over $1 million.

- **Fareed Yasin** completed assignments at Pantex, where he was involved in day-to-day oversight of assembly and disassembly of nuclear weapons, and at Y-12, where he supported safety and oversight of the ~200 fissile processes to ensure nuclear criticality safety.
Where They Are Now

NGFP alumni are highly sought after by employers in the nuclear security community. After completing their assignments, the majority of fellows from the Class of 2015-2016 accepted positions where they continue to support the global security mission within government, industry, private sector, or academia. Below is the status of the fellows as of summer of 2016.

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Position</th>
</tr>
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<tbody>
<tr>
<td>Ian Andrews</td>
<td>NNSA NA-142, Program Analyst</td>
</tr>
<tr>
<td>Benjamin Briese</td>
<td>NNSA NA-213, Foreign Affairs Specialist</td>
</tr>
<tr>
<td>Andrew Brown</td>
<td>NNSA NA-231, Foreign Affairs Specialist</td>
</tr>
<tr>
<td>Bonnie Canion</td>
<td>Lawrence Livermore National Laboratory, Postdoctoral Researcher</td>
</tr>
<tr>
<td>Andrew Cartas</td>
<td>Department of State, International Organization/Office of Technical Specialized Agencies American Association for Advancement of Science Fellow</td>
</tr>
<tr>
<td>Elsa Castillo</td>
<td>Livermore Field Office, Physical Scientist</td>
</tr>
<tr>
<td>Daniel Custead</td>
<td>NNSA NA-19, General Engineer</td>
</tr>
<tr>
<td>Matthew Deal</td>
<td>Texas Attorney General’s Office, Assistant Attorney General</td>
</tr>
<tr>
<td>Emily Eng</td>
<td>NNSA NA-211, Foreign Affairs Specialist</td>
</tr>
<tr>
<td>Madeleine Faubert</td>
<td>Los Alamos Field Office, Program Analyst</td>
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<tr>
<td>Phillip Forsberg</td>
<td>NNSA NA-143, Engineer</td>
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<tr>
<td>David (Kyle) Fowler</td>
<td>NNSA NA-193, Program Analyst</td>
</tr>
<tr>
<td>Lance Garrison</td>
<td>NNSA NA-21, Physical Scientist</td>
</tr>
<tr>
<td>William Gordon</td>
<td>NNSA NA-513, Engineer</td>
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<tr>
<td>Thomas Gray</td>
<td>IAEA, Division Nuclear Security Junior Professional Officer</td>
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<tr>
<td>Orrin Hasal</td>
<td>NNSA APM-124.1, Specialist</td>
</tr>
<tr>
<td>Jessica Jagmin Brookins</td>
<td>NNSA NA-232, Foreign Affairs Specialist</td>
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<tr>
<td>Dana Jespersen</td>
<td>NNSA-MB, Program Analyst</td>
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<tr>
<td>Krystal Kasal</td>
<td>Not available at the time of publication</td>
</tr>
<tr>
<td>Elizabeth Lostracco</td>
<td>DOE/IN, Specialist</td>
</tr>
<tr>
<td>Christopher McGuire</td>
<td>Department of State AVC/MNA, Foreign Affairs Officer</td>
</tr>
<tr>
<td>Sarah McPhee</td>
<td>NNSA NA-113, Program Analyst</td>
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<tr>
<td>Joshua Merritt</td>
<td>NNSA NA-143, General Engineer</td>
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<tr>
<td>Adam Myers</td>
<td>Department of Treasury Office of Terror Financing &amp; Financial Crimes, Policy Advisor</td>
</tr>
<tr>
<td>Sarah Norris</td>
<td>NNSA NA-212, Foreign Affairs Specialist</td>
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<td>Robert (Ty) Otto</td>
<td>PNNL, Engineer</td>
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<td>Department of State, Foreign Affairs Officer</td>
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<td>Jessica Paul</td>
<td>Lawrence Livermore National Laboratory Officer, Analyst/Counterproliferation Analysis</td>
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<tr>
<td>Jason Portner</td>
<td>MELE Associates (subcontractor to NNSA), Program Analyst</td>
</tr>
<tr>
<td>Sabrina Ragaller</td>
<td>NNSA NA-1.3, Specialist</td>
</tr>
<tr>
<td>Merit Schumaker</td>
<td>NNSA NA-123, Program Manager, General Engineer</td>
</tr>
<tr>
<td>Daniel Sharp</td>
<td>NNSA NA-123, Federal Program Manager</td>
</tr>
<tr>
<td>Bryan Sims</td>
<td>NNSA NA-112, Physical Scientist</td>
</tr>
<tr>
<td>Corey Smith</td>
<td>NNSA NPO, Security Specialist</td>
</tr>
<tr>
<td>Temica Stewart</td>
<td>NNSA APM-123.2, Contract Specialist</td>
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<tr>
<td>Tracey-Ann Wellington</td>
<td>Department of State, International Organization/Office of Technical Specialized Agencies American Association for Advancement of Science Fellow</td>
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<tr>
<td>Ronnie Williams</td>
<td>NNSA APM-123.2, Specialist</td>
</tr>
<tr>
<td>Fareed Yasin</td>
<td>Oak Ridge National Laboratory, Engineer/Facility Safety</td>
</tr>
</tbody>
</table>

Approximately 79% of the fellows from the Class of 2015-2016 accepted positions within the NNSA/DOE complex (including national laboratories) and more than 90% remain within the national security community.
Alumni Spotlight

With the completion of the Class of 2015-2016, more than 350 fellows have now completed the program. Below are a few recent graduates of the program who built upon their NGFP experience to deliver significant impact to the nuclear security enterprise as well as give back to the program that helped launch their career.

Staci R. Brown,  
Class of 2014-2015

True to the mission of NGFP, Dr. Staci Brown launched her fellowship into a full-time career with the NNSA and is helping to foster future leaders across the technical and policy realm.

Staci first joined NNSA as a fellow in the Class of 2014-2015 working in the Office of Research & Development (NA-113) supporting multiple initiatives within the Science portfolio. Following her fellowship, Staci joined NNSA as a federal staff member supporting NA-113 as the program manager for the Dynamic Materials Properties Program and providing collaborative support to the Stewardship Science Academic Programs. She is also the federal program lead for Matter Radiation Interactions in Extremes project to develop a capability for the time-dependent study of materials behavior at the mesoscale.

“I always say that this fellowship is a platform for opportunity and I truly believe that. When I applied, I wanted to be a part of the decision-making process on how the country spends its capital on science initiatives and that is exactly what I am doing just a year out of graduate school. I am helping to shape and influence how the science supports national policy and vice versa,” Staci said.

Staci also continues to support STEM education and outreach, including serving as a mentor within the Florida-Georgia Louis Stokes Alliance Minority Program to support minorities pursuing STEM careers. She has also supported NGFP on several occasions to share her experience with new and potential fellows.

“The success of any organization is not solely due to the tools at our disposal, but the expertise and wisdom of the people using the tools. To sustain a viable national security complex, it is essential to mentor and foster the next generation of leaders.”

Staci R. Brown, Class of 2014-2015

Lindsey Gehrig,  
Class of 2009-2010

Lindsey Gehrig was a fellow in the Class of 2009-2010. During her fellowship, she supported Associate Assistant Deputy Administrator Anne Phillips, who was then the Director of the Office of Global Security Engagement and Cooperation (NA-242). In addition to her front office duties, Lindsey supported the Nuclear Forensics Engagement Program and helped transition the Cooperative Monitoring Center in Amman, Jordan (CMC-Amman) to the Middle East Scientific Institute for Security. After NGFP, Lindsey remained in Washington, D.C. and spent six years working for NNSA, during which time she supported different programs in the Office of Nonproliferation and Arms Control (NA-24), including the Biological Weapons Convention portfolio, the International Nuclear Security Program, and the International Nuclear Safeguards Engagement Program. Her primary area of responsibility involved bilateral engagement with foreign partners to help develop the procedures, programs, systems, and expertise necessary to sustainably implement effective physical protection and safeguards regimes.

In 2015, Lindsey joined PNNL as a nonproliferation policy analyst in PNNL’s Global Security Technology and Policy Group. Bringing her experience full circle, in 2016 Lindsey took on the role of NGFP Team Lead to support new fellows. As a former fellow, Lindsey brings personal experience to mentoring and guiding fellows to ensure they have a productive experience in the program. Lindsey is supporting 12 fellows in the Class of 2016-2017.

“It can be challenging to understand your place as a fellow within NNSA, PNNL, and the overall nuclear security enterprise. I enjoy this opportunity to help fellows get the most out of their experience.”

Lindsey Gehrig, Class of 2009-2010
Since her fellowship in the Class of 2000-2001, Cary O’Connell has continued on the path of impacting the future of nonproliferation. Today, Cary is the executive director of Culmen International, a worldwide provider of technical and management services with expertise spanning chemical, nuclear, biological, and border security nonproliferation.

“I am fortunate that I’ve been able to grow into my career while supporting programs I am passionate about and that I was first introduced to during my fellowship,” said Cary. During her fellowship, Cary supported the NA-20 front office, where she worked with various Cooperative Threat Reduction efforts, some of which she continues to support today while also managing contracts for several national laboratories. She is a program manager for approximately 12 contracts spanning multiple agencies (i.e., DOE, Department of State, and Department of Defense) and the globe. Her portfolio with PNNL alone touches 85 countries and includes 150 different task orders.

“What I gained through NGFP has been the constant thread throughout my entire career. I came to the program with Russia expertise but the fellowship helped me more on the technical side as well as with networking across the broader nuclear security and nonproliferation community. Even now, many of the people I met during NGFP are still at the agencies I am working with.”

In her work at Culmen International, Cary is currently joined by two NGFP alumni: Doug Dyer, Class of 2004-2005, and Christa Dove Connor, Class of 1998-1999. During his fellowship, Doug supported what was then NA-25, International Material Protection and Cooperation, where he worked with the Russian Ministry of Defense on their site security upgrades. Today, he is the program manager responsible for $7 million in revenue per year in the NNSA and Transportation Security Administration portfolios. Christa, who was part of one of the earliest fellowship classes, is now the project manager for the Logistics Support Contract for PNNL, providing logistics support to U.S. Government international security programs around the globe.

Doug noted that approximately 15-20 former fellows have worked or currently work at Culmen and a majority of the federal employees he supports at NNSA are former fellows as well.

“**We consistently seek out fellows to join our team because we know the caliber of candidate the program hires and we know the types of experiences and skills they have that we and our clients need.**

*Cary O’Connell, Class of 2000-2001*

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**Adam Hoffman, Class of 2014**

**Derek Estes, Class of 2013**

Alumni Adam Hoffman (left, Class of 2014) and Derek Estes (right, Class of 2013) received the 2016 Linton F. Brooks Medal for Dedication to Public Service. This award recognizes employees whose actions and deeds exemplify former Administrator Linton Brooks’ spirit of commitment and achievement. Derek is a program analyst in the Office of Counterterrorism and Counter-proliferation (NA-80). He received the award for designing and developing a statistical-based approach to compare and prioritize NNSA’s radiological/nuclear counterterrorism outreach efforts nationally and among partner countries, ensuring efforts will deliver – on a relative basis – the biggest risk reduction values. Adam is a general engineer in the Office of Defense Nuclear Nonproliferation (NA-20). He received the award for his outstanding leadership in the NNSA Joint Comprehensive Plan of Action Procurement Working Group’s development of export control protocols.
## NGFP Class of 2015-2016
### By the Numbers

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Fellows with a technical background</td>
<td>41%</td>
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<tr>
<td>Fellows from 27 top universities</td>
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</tr>
<tr>
<td>Alumni to date</td>
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<tr>
<td>Applicants</td>
<td>210+</td>
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<td>Fellows placed with the Department of State</td>
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<tr>
<td>Interviews</td>
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<tr>
<td>Recruitment events and presentations</td>
<td>60+</td>
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<tr>
<td>Fellows with a policy background</td>
<td>59%</td>
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<tr>
<td>Positions with DOE/NNSA (including National Laboratories)</td>
<td>~79%</td>
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<tr>
<td>Different program and site offices supported by fellows (including Department of State)</td>
<td>32</td>
</tr>
</tbody>
</table>
Appendix:
Class of 2015-2016
Biographies

The Class of 2015-2016 brought to NGFP impressive credentials partnered with previous experience spanning the national security community, academia, and industry.

Photo: Fellows touring B Reactor at the Hanford Site.
The Class of 2015-2016 at the closing ceremony in Washington, D.C. with Madelyn Creedon, NNSA Principal Deputy Administrator, and Rear Admiral Randall Hendrickson, NNSA Associate Administrator for Management and Budget.
Appendix

Class of 2015-2016 Biographies

Ian Andrews
NA-50 Office of Infrastructure & Operations
Washington, D.C.

Ian Andrews’ interest in the political and technical challenges of nuclear security stems from an internship he completed with the Department of Nonproliferation and National Security at Brookhaven National Laboratory. He researched the nuclear fuel cycle and methods for inspecting nuclear facilities and verifying safeguards compliance while also gaining insight into the role of international treaties and export controls in preventing unwanted proliferation.

At Brookhaven, he participated in projects involving both technical and policy issues, including an analysis of policy options under the New START (Strategic Arms Reduction Treaty) agreement and studying foreign nuclear programs to identify important patterns in their development. He also organized a department-wide simulation exercise based on an IAEA inspection of Iran’s Parchin facility.

Ian’s recent work includes being a graduate research assistant at the University of Maryland Institute for Advanced Computer Studies, where he conducted computational analysis of illicit supplier and procurement networks for nuclear materials, technology, and expertise, and identified the critical connections and points of failure in these networks. He also completed an internship with the National Consortium for the Study of Terrorism and Responses to Terrorism, where he conducted and presented research on the risk, cost, and consequences of terrorist attacks in the United States for a project funded by the Department of Homeland Security.

In April 2015, Ian completed a master’s thesis at the University of Maryland that focused on the growing problem of spent nuclear fuel storage and evaluated options for stronger international engagement on the issue.

Benjamin Briese
NA-213 Office of Nuclear Smuggling Detection & Deterrence
Washington, D.C.

Benjamin Briese completed his Master of Arts degree in international security studies at the Josef Korbel School of International Studies at the University of Denver in 2015. He also has a bachelor’s degree in international studies from Saint John’s University. His research interests center on nonproliferation initiatives and U.S. nuclear deterrence in the 21st century.

Ben spent more than three years working for the humanitarian non-government Agency for Technical and Development Cooperation (ACTED) in Bosnia, Israel, Iraq, Yemen, and Syria. His posts with ACTED included Senior Assessment and Program Development Officer in Syria, Program Development Officer in Baghdad, Emergency Response Program Officer in Yemen, and Regional Reporting Intern in Jordan. Additionally, he completed an internship with the United Nations Development Program in Bosnia where he worked on a democracy and governance project. In Iraq, he led a team of five national staff to design, implement, and analyze rapid needs assessments of vulnerable populations. His team also monitored and evaluated five projects throughout Iraq representing over $4 million in donor funds.
Ben completed a Sié Fellowship with the Sié Chéou-Kang Center for International Security and Diplomacy at the University of Denver. In this role, he assisted with the research and coding of quantitative and qualitative data on the operations of private security companies in the Middle East for the Private Security Mapping Project. In 2014, Ben was awarded a Rosenthal Fellowship in which he assisted Congressman Brad Sherman with his work on the House Foreign Affairs Committee and the Subcommittee on Terrorism, Nonproliferation, and Trade. He prepared briefing documents for the Congressman on Iranian compliance with IAEA safeguards, North Korea's nuclear weapons program, and international civilian nuclear cooperation.

**Andrew Brown**

**NA-23 Office of Material Management & Minimization**  
**Washington, D.C.**

Andrew Brown graduated with a Master of Arts in nonproliferation and terrorism studies from the Monterey Institute of International Studies in 2014. He earned a Master of Arts in international relations from University of St. Andrews in 2012.

During his graduate studies in Monterey, Andrew worked part-time as a research assistant at the James Martin Center for Nonproliferation Studies. In 2014, Andrew took a semester away from graduate school to intern at the Department of State in the Bureau of International Security and Nonproliferation, during which time he was afforded the opportunity to serve on the U.S. delegation to the 2014 Preparatory Committee of the Nuclear Nonproliferation Treaty Review Conference. Andrew also interned at the United Nations Office for Disarmament Affairs in the Nuclear Weapons Branch. Before starting his fellowship, Andrew worked full-time as a research associate, also at the James Martin Center for Nonproliferation Studies.

**Bonnie Canion**

**NA-22 Nuclear Nonproliferation Research & Development**  
**Washington, D.C.**

Bonnie Canion completed her Ph.D. in March 2016 in nuclear and radiation engineering at the University of Texas (UT) at Austin, where her dissertation work was funded by the Nuclear Forensics Graduate Fellowship. She also has a master's degree from the same program and a bachelor’s degree in physics and mathematics from Seattle University. Bonnie’s research interests focus on the field of radiation detection, particularly fields involving the prevention and reduction of proliferation activities, such as nonproliferation, nuclear forensics, treaty verification, and safeguards.

Bonnie’s dissertation research was conducted primarily at Oak Ridge National Laboratory with the Nuclear Materials Detection and Characterization group. Her research involved investigating a range of techniques for characterizing shielded special nuclear material utilizing the photon signature induced by a neutron active interrogation system.

The range of Bonnie’s technical interests within the field of nuclear security is clear from her varied research experiences. Her master’s research involved characterizing environmental samples via neutron activation analysis utilizing UT’s research reactor. Bonnie also completed an internship at Sandia National Laboratories, where she researched the problem of detecting nuclear material hold-up, and investigated and recommended technologies to address the problem. Following this internship, she began a project that involved learning about physical protection systems of nuclear power facilities and developing a method of modeling the security features in such a way that they could be integrated into a game theoretic threat assessment model.
Andrew Cartas  
NA-233 Office of Defense Nuclear Nonproliferation & Minimization 
Washington, D.C.

Andrew served as an NNSA fellow in Washington D.C., where he provided technical support and policy analysis to NNSA’s Office of Defense Nuclear Nonproliferation. His work included supporting the disposition, repurposing, and managing excess weapons-usable nuclear material, from domestic and international stockpiles and materials, to the implementation of the Plutonium Management and Disposition Agreement with Russia.

During the fellowship, Andrew was detailed to the State Department’s Bureau of Arms Verification and Control where he provided technical expertise on the creation and implementation of policy related to various international diplomatic frameworks. Andrew has since accepted an American Association for the Advancement of Science Fellowship within the State Department’s Bureau of International Organizations, Office of Specialized and Technical Agencies where he will provide science expertise and promote U.S. policy objectives within more than 40 international agencies.

Andrew has previous experience at the University of Florida Laboratory for the Development of Advanced Nuclear Fuels and Materials as well as the Idaho, Argonne, and Oak Ridge National Laboratories. As part of the Nuclear Engineering Student Delegation, Andrew also worked with a variety of federal and private organizations, such as the DOE, Department of Homeland Security, AREVA, Nuclear Energy Institute, Nuclear Regulatory Commission, and the Office of Management and Budget for the purpose of changing and influencing nuclear engineering education and science policy.

In 2014, Andrew Cartas completed a Ph.D. in nuclear engineering sciences from the University of Florida with specializations in accident tolerant nuclear fuels, material science, and economics. His work and research interests include providing technical support for the creation of public policy, enhancing diplomacy through scientific creativity, and advancing science to safeguard against nuclear threats around the world.

Elsa Castillo  
NA-00-LLFO Livermore Field Office  
Livermore, CA

Elsa Castillo received her first Master of Science in nuclear physics from Belarussian State University in Minsk, Belarus and obtained her second in physics as well as a Ph.D. in environmental science and engineering from the University of Texas at El Paso (UTEP). She has vast studying, working, and living experience in different countries such as Argentina, Hungary, Ecuador, Brazil, Panama, Uruguay, Chile, Costa Rica, Peru, and Bermuda.

Previously, Elsa worked as a scientific researcher in a radiation laboratory in Cuba, where she published several scientific papers on radiation processing. She has worked as a health physicist for the National Nuclear Regulatory Commission in the Dominican Republic, where she designed a Latin-American regional project, which was awarded nearly $1 million by the IAEA. She also worked as a Spanish teacher in Haiti as well as an assistant physics professor in two Dominican Republic universities.

In 2013, Elsa worked as a library research scholar for the United Nations Scientific Committee on the Effects of Atomic Radiation, Vienna, Austria. As a UTEP research assistant, she participated in three scientific expeditions over the tropical Atlantic Ocean, performing measurements of aerosol physical properties in the marine boundary layer for Saharan dust characterization. Elsa is a Registered Environmental Professional as well as a Certified Environmental Specialist.
Daniel Custead  
**NA-191 Office of Defense Programs Delivery Systems**  
**Washington, D.C.**

Daniel Custead is a nuclear engineer with policy experience and an interest in bridging scientific and policy communities to help the government make technically informed decisions. He has a master’s and bachelor’s degree in nuclear engineering, as well as a minor in mathematics, from Texas A&M University.

Daniel completed his fellowship in the front office of NA-19, Office of Major Modernization Programs. He helped compile and edit portions of the annual Defense Programs report, the Stockpile Stewardship and Management Plan. He also helped maintain budgetary interface agreements between the B61 LEP and other Defense Program offices. Highlights from the NGFP experience include touring the national labs, receiving unique technical training, and working short periods in the Administrator’s Action Group.

Prior to NGFP, Daniel completed an internship with the Science Applications International Corporation. He was contracted to the Office of the Deputy Assistant Secretary of Defense for Nuclear Matters in the Office of Countering Nuclear Threats. In this role, he gained perspective on the contrasting roles between the DOE, the Department of Defense, and other agencies in nuclear security.

During his time as a graduate teaching assistant at Texas A&M University, Daniel helped organize engineering demonstrations of more than 3,000 students and helped teach classes of up to 100 students. During his undergraduate career, Daniel worked in the Fuel Cycle and Materials Laboratory for the university’s Department of Nuclear Engineering. In 2012, he completed an internship for the Constellation Energy (an Exelon corporation), where he worked in Systems Engineering.

Matthew Deal  
**NA-142 Office of Strategic Planning**  
**Washington, D.C.**

Matthew Deal received his master’s degree in global policy studies—with a specialization in security, law, and diplomacy—from the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin. He holds a bachelor’s degree in history and political science from the University of California at Davis and a juris doctor degree from Thomas Jefferson School of Law. Prior to graduate school, Matthew interned with the United Nations International Criminal Tribunal for Rwanda and worked as a Deputy Attorney General in Nevada, holding positions in criminal prosecution and civil litigation.

While in Austin, Matthew worked as a graduate research assistant with the Robert S. Strauss Center for International Security and Law. In this role, he assessed the correlation between foreign aid and democratic development in Kenya and Tanzania. Matthew also worked as a graduate research assistant with the Nuclear Proliferation Prevention Project, where he explored the feasibility of eliminating bomb-grade uranium from naval nuclear reactors.

During the summer of 2014, Matthew studied abroad in Brazil and earned an executive certificate in counterterrorism studies from the International Institute for Counterterrorism in Herzliya, Israel.
Emily Eng
NA-211 Office of International Nuclear Security
Washington, D.C.

Emily Eng earned a master’s degree in diplomacy and national security from the University of Kentucky’s Patterson School of Diplomacy and International Commerce. She also holds a bachelor’s degree in communications with an emphasis in public relations and advertising and a double minor in business administration and sociology from Milligan College.

In 2014, Emily interned with the State Department at the U.S. Embassy in Vientiane, Laos, where she worked on a wide range of political and economic issues and U.S. policy. During her time there, she gained valuable experience working directly with U.S. government officials, foreign officials, and international partners. Her work included participating in meetings, coordinating diplomatic events, managing grant applications, research and writing, planning reporting trips, and supporting public diplomacy outreach.

Emily has experience living, working, and studying in China, Southeast Asia, and the Middle East. She has intermediate proficiency in Mandarin Chinese and has studied Modern Standard Arabic and Lao. Her previous experience includes teaching English in China.

Madeleine Faubert
NA-00-LAFO Los Alamos Field Office
Los Alamos, NM

Madeleine Faubert earned her master’s degree in international security with a concentration in cyber security from the University of Denver in 2015. She also earned her bachelor’s degree in political science with minors in French and psychology from Texas A&M University in 2013.

Madeleine approaches nuclear security from both an international and domestic perspective. Her graduate work focused on the East Asian region. She studied different facets of various countries with an emphasis on the Democratic People’s Republic of Korea’s nuclear weapons program.

Madeleine’s interests also include domestic nuclear security. In 2014, while working at the Counterterrorism Education Learning Lab in Denver, Colorado, she helped develop counterterrorism strategies for local law enforcement. She used open sources in conjunction with Department of Homeland Security emergency preparedness manuals to design and develop curriculum that she would later present to groups of first responders. Additionally, she was the project coordinator for the lab’s award-winning and nationally recognized training initiative, the Community Awareness Program.

In 2015, Madeleine completed an internship with the Cyber Statecraft Initiative with the Atlantic Council in Washington, D.C., where she conducted substantive research on various cyber topics including NATO cyber policy, the future of internet governance, and cyber risks in the Gulf region.

Phillip Forsberg
NA-143 Office of Strategic Planning & Cost Estimation
Washington, D.C.

Phillip Forsberg completed his master’s degree in health physics at Purdue University in 2014 and is currently a Ph.D. candidate in nuclear engineering at Purdue University. While at Purdue, he developed an understanding for nuclear reactor physics and radiation detection while serving as a grader for a graduate-level reactor physics course, a teaching assistant for the senior nuclear laboratory class, and a group leader.
for a public policy course hosted by the Purdue Global Policy Research Institute. He was also the nuclear engineering ambassador for the university, giving presentations and tours to prospective students and representing nuclear engineering at the Graduate Student Advisory Council.

In 2012, Phillip was awarded a three-year fellowship with the Department of Homeland Security STEM Career Development Program; the award recognizes distinguished students in science, technology, engineering, and mathematics whose work will contribute to improvements in homeland security. Phillip also completed a health physics internship with Purdue Radiological and Environmental Management and gained experience in nuclear safeguards as an intern with the Argonne National Laboratory.

Phillip’s leadership experience includes serving as the president of Alpha Nu Sigma Nuclear Engineering Honor Society and Nuclear Engineering Graduate Organization, treasurer of American Nuclear Society and the Health Physics Graduate Organization, and executive board member of Purdue PUGWASH. At the 2013 American Nuclear Society student conference, he was awarded best paper/presentation and he was also awarded best poster at the Purdue Sigma Xi conference.

**David (Kyle) Fowler**  
**NA-193 Office of Defense Programs Science & Manufacturing**  
**Washington, D.C.**

Kyle Fowler’s background spans nuclear security policy, chemical science, and international affairs, with an emphasis on the Middle East, including intermediate Arabic language proficiency and a semester in Istanbul, Turkey. He completed a master’s degree in international affairs (national security and diplomacy track) from the George Bush School of Government and Public Service at Texas A&M University in 2015. He also has bachelor’s degrees in chemical science and international affairs plus a minor in psychology from Florida State University.

Kyle’s research interests focus on American nuclear force posture and modernization. While at Texas A&M University, Kyle was a graduate assistant to Professor Charles Hermann, tasked with researching explanations for changes in foreign policy. He has also taken multiple courses through the Nuclear Security Science & Policy Institute, an organization jointly administered by the Bush School and the Texas A&M Department of Nuclear Engineering. The school has a joint multi-year research contract with Lawrence Livermore and Sandia National Laboratories.

Kyle’s experience also includes interning with the Government Accountability Office, where he researched drug-impaired driving as part of the Physical Infrastructure mission team, and working with the Firearm Purchase Program at the Florida Department of Law Enforcement.

**Lance Garrison**  
**NA-22 Nuclear Nonproliferation Research & Development**  
**Washington, D.C.**

Lance Garrison earned his Ph.D. in nuclear physics from Indiana University in 2014. He also has a bachelor’s degree in physics from the University of Missouri.

As a nuclear physicist pursuing nuclear security, Lance aims to apply science to societal issues. While at Indiana University, he participated in the American Geophysical Union Science Policy Conference in 2014 and the Short Course on Nuclear Weapons Issues in 2013. The largest step toward this career goal, however, was his research internship with the Arms Control Association (ACA) in Washington, D.C., where he investigated U.S. policy regarding Iran among other nuclear security and nonproliferation issues. He studied nuclear reactors and gas centrifuges and estimated Iran’s practical need for the full variety of possible Iranian nuclear reactor configurations. These estimates were used in a proposed comprehensive Iranian nuclear agreement and are included in the ACA’s 2014 Iran Briefing Book for policymakers.
Lance also has substantial experience as a science educator. In 2007 Lance was one of five Indiana University students to receive the Graduate Assistance in Areas of National Need Fellowship for science teaching. However, the highlight of his education experience was the Foundations in Science and Mathematics summer program at Indiana University. Lance co-founded and administered this program to prepare local high school students for their upcoming science and mathematics classes and to provide graduate students an opportunity to design and instruct their own courses. The program size has increased by a factor of five over four years.

**William Gordon**  
NA-513 Office of Worker Safety & Health Services  
Albuquerque, NM

William Gordon earned his master’s degree in health physics (2015) and a bachelor’s degree in radiological health engineering (2013) from Texas A&M University, where his research interests included in-core instrumentation, experimental design, and safety simulation and modeling. William is a registered engineering intern in the State of New Mexico, pursuing Professional Engineering licensure.

William’s previous work experience includes time as a guest student worker at Los Alamos National Laboratory where he programmed a radiation shielding application using Geant4’s particle simulation capabilities for a gas Cherenkov detector that is used at the National Ignition Facility. He also worked as a research technician in a nuclear fuels laboratory at Texas A&M and separately at a Biosafety Level II facility at a nuclear reactor.

William’s leadership roles include being the volunteer webmaster for the South Texas Chapter of the Health Physics Society and serving as a merit badge counselor for the youth of the Rio Grande Valley of South Texas. He also served as a finance director for the 2015 American Nuclear Society Student Conference, which brought more than 600 students and professionals from across the globe to Texas A&M.

**Tom Gray**  
NA-20-FO Office of Defense Nuclear Nonproliferation  
Washington, D.C.

Tom Gray earned a master’s degree in nonproliferation and terrorism studies at the Middlebury Institute of International Studies in Monterey, California, where he received the 2015 Gard’n’Wall Nonproliferation Scholarship. Tom acquired extensive knowledge of nuclear energy while in the U.S. Naval Nuclear Power Program and is proficient in Russian.

As a U.S. nuclear submarine officer, Tom worked on a ballistic missile submarine and gained practical experience operating and supervising naval nuclear reactors. He also managed several programs while in the Navy, including the radiological controls, strategic communications, and cryptography programs aboard the USS Alabama. In addition to serving as the strategic communications officer and chemistry and radiological assistant aboard his submarine, Tom later served as the lead shift engineer for a crew of 50 nuclear operators at the U.S. Navy’s nuclear training prototype in Charleston, South Carolina.

In 2014, Tom joined PNNL as a master’s intern. In this role, he participated in the Next Generation Safeguards Initiative Program and pursued research on safeguards approaches for 4th Generation Reactors as well as developing engagement plans for international partners.

Tom also worked at the IAEA in Vienna, Austria, as an intern in the Department of Safeguards. While there, he assisted the Concepts and Approaches Division with a number of different projects, including drafting a report on the department’s external operating environment, creating a departmental repository for the IAEA’s verification mandate, and creating training materials for a safeguards workshop targeting newcomer states to the nuclear industry.

In 2016, Tom was awarded the first DNN fellowship in honor of the late Ian Hutcheon, a longtime nuclear forensics expert at Lawrence Livermore National Laboratory.
Orrin Hasal  
NA-APM-D.C. Office of Acquisitions & Project Management  
Washington, D.C.

Orrin Hasal has a strong background in intelligence and military operations with experience as an intelligence officer, security professional assigned worldwide and in austere, high-risk environments. He served in the U.S. Marine Corps and the Department of Justice (DEA – San Diego Division).

Orrin has served in a range of positions including senior research manager for the Intelligence Support Agency, U.S. Army in Afghanistan. He served as the deputy country security officer in Afghanistan for operations in explosives ordinance disposal. He conducted intelligence and security operations in Iraq, Afghanistan, Bosnia-Herzegovina, and the Philippines. He received several Exceptional Performance Awards, Intelligence Medal, Commander’s Award for Civilian Service, Superior Service Award, Hostile Action Medal, NATO Medal, Unit Citations, and other campaign medals.

Orrin’s accomplishments include leading an effort in the creation and establishment of a Forward Operating Base in a remote part of Regional Command East – Nuristan, Afghanistan by planning and executing a complex plan of logistics, training, and supply with Afghan Security Forces and International Security Assistance Force partners. In addition, Orrin and his U.S. team conducted numerous actions in Iraq where they were responsible for the recovery of coalition personnel being held by opposition forces. In Bosnia-Herzegovina, his team along with Stabilization Force partners were responsible for the apprehension of individuals wanted by the International Criminal Tribunal.

Orrin completed a master’s degree in global security studies at Johns Hopkins University in 2016 as well as a master’s degree in computer information systems and a bachelor’s degree in finance at California State University in 1997. He is professionally trained in Arabic, Dari, Tagalog, and Spanish.

Jessica Jagmin Brookins  
NA-232 Office of Nuclear Material Removal  
Washington, D.C.

After serving in the Peace Corps in Romania from 2011 to 2013, Jessica Jagmin Brookins narrowed her focus from international organizations and development, which she had studied as she earned her bachelor’s degree at Boston University, to an interest in security risks and vulnerabilities of developing nations. She built on this experience through further education, earning a master’s degree in foreign service at Georgetown University in Washington D.C., with a concentration in global politics and security. She is fluent in Romanian and also has intermediate fluency in French.

Jessica completed a foreign policy internship at the State Department in the Bureau of International Security and Nonproliferation’s Office of the Biological Policy Staff, the office responsible for U.S. participation in the Biological Weapons Convention. She actively participated in the production of the U.S. Confidence Building Measures report, engaging directly with laboratories from across the country to accurately report on U.S. biological facilities and research. As a student trainee at the Federal Deposit Insurance Corporation (FDIC) supporting the Office of International Affairs, she also researched developments in the Chinese banking sector and regulatory environment, produced and updated country briefing reports, and assembled the digital briefing book for FDIC principals attending the 2014 U.S.-China Strategic and Economic Dialogue.

Jessica was the president of the graduate student organization Professionals in Russian, Eastern European, and Eurasian Affairs, where she led a team of five officers and more than 100 members to become one of the most active student groups in the School of Foreign Service. She also organized and managed events relating to international security, including the Future of Central Asia after the International Security Assistance Force Withdrawal and Security in the North Caucasus.
Dana Jespersen
NA-00-SRFO Savannah River Field Office
Aiken, SC

In 2015, Dana Jespersen completed a master’s degree in public administration, with an emphasis in policy analysis, at the Martin School of Public Policy and Public Administration at the University of Kentucky. She also has a bachelor’s degree in political science from Slippery Rock University in Pennsylvania.

Dana has a strong interest in energy issues and policy partnered with operations and management experience. Her recent research included a focus on air pollutant emissions and state-level health care costs. She also completed an internship for the Jackson Township Manager in Pennsylvania, where she assisted the township manager in managing data for the Land Use Assumptions Report and the Comprehensive Plan and updated the Book of Ordinances and Resolutions.

In 2015, Dana worked as a Graduate Assistant of Security and Operations at the University of Kentucky Student Center. In this role, she assisted the Assistant Director of Security and Operations in analyzing and writing assessment reports from the Provost of the University and oversaw the Student Center’s Professional Enhancement Program.

Krystal Kasal
NA-113 Office of Defense Programs Research & Development
Washington, D.C.

Krystal Kasal is translating her diverse science background into the science of nuclear security. She has a master’s degree in physics from Washington State University and a bachelor’s degree in physics, with an emphasis in astrophysics, from the University of Missouri. Her wide-ranging research interests have explored diffusion of solids using Perturbed Angular Correlation spectroscopy, the properties and age of interstellar clouds, and archeological excavation in Macedonia.

Krystal’s original interest was in astrophysics: her undergraduate work was funded by and presented at the NASA Missouri Space Grant Consortium, and she was awarded best research poster of the year at her school. She also worked as a teaching assistant and lab instructor in physics and astronomy, teaching about electricity, magnetism, optics, and radioactivity.

She began working as a research assistant at Washington State University, gaining specific and applicable expertise in the detection of nuclear radiation in intermetallics using scintillation detectors and time-coincidence methods as well as in sample fabrication and data analysis of time-series spectra. It was a radiation safety training course and working with radioactive isotopes required for her research in metals diffusion that drew Krystal to the nuclear industry.

Elizabeth Lostracco
NA-212 Office of Radiological Security
Washington, D.C.

Elizabeth Lostracco came to the NGFP fellowship opportunity to pursue a career in the field of counterterrorism and intelligence. She graduated in December 2015 with a master’s degree in U.S. foreign policy and national security from the School of International Service at American University in Washington, D.C. During her graduate studies, she completed a practicum research project for the Defense Intelligence Agency to analyze the influencers of China’s politburo standing committee, and
determine influencers of China’s maritime security and North Korea-China relations. Her research interests center on counterterrorism efforts and international security policy in the Middle East, specifically researching the links between terrorism in Iraq and Syria and how new factions affect regional stability. Elizabeth also has a bachelor’s degree in international relations from the James Madison College of Public Affairs at Michigan State University.

Elizabeth has worked in non-profit governance management in Washington, D.C.. Most recently, she worked as a program manager for the National Academy of Sciences where she oversaw the election of 85 new members annually. During a fellowship in the Illinois Governor’s Office from 2007-2008, Elizabeth was a special projects and outreach coordinator and managed a variety of associations and special interest groups. She facilitated new state policy outreach programs, governor events, and advocacy efforts between the governor’s office, state agencies, constituents, non-profit organizations, and elected officials. Prior to this position, she also completed an internship with the Hatchguard Security Company in London, England, where she conducted critical infrastructure policy research for seven leading nations and initiated the Department of Homeland Security SAFETY Act technology certification for Hatchguard security products.

Christopher McGuire
Bureau of Arms Control, Verification & Compliance, Office of Multilateral & Nuclear Affairs
Washington, D.C.

Christopher McGuire earned a master’s degree in public policy, with a concentration in international and global affairs, from Harvard University’s Kennedy School of Government in 2015. He also received a bachelor’s degree in public policy from Pomona College in 2011.

Christopher has worked on arms control and nonproliferation issues both in government and in nongovernmental organizations. In 2010, Christopher interned at the Department of State in the Bureau of International Security and Nonproliferation. He supported the office responsible for coordinating and implementing U.S. policy related to the global nuclear nonproliferation regime, namely the Nuclear Nonproliferation Treaty and IAEA. He worked directly with officials at the DOE, Department of Defense, and the White House on nonproliferation initiatives.

In graduate school he continued his focus on nuclear nonproliferation and arms control, contributing to several reports published by Harvard’s Project on Managing the Atom. As a student fellow and research assistant at Harvard’s Belfer Center for Science and International Affairs, Christopher was responsible for maintaining a comprehensive accounting of global stockpiles of highly enriched uranium and plutonium, relying on a wide variety of open-source publications. In 2014, he returned to the Department of State, working in the Bureau of Arms Control, Verification, and Compliance, where he was given lead responsibility for drafting and clearing within the interagency the briefing papers for all disarmament-related resolutions at the United Nations.

Sarah McPhee
DOS/ISN/NESS Office of Nuclear Energy, Safety, & Security, U.S. Department of State
NA-1.1 Office of Policy, NNSA Administrator & Under Secretary for Nuclear Security
Washington, D.C.

Sarah McPhee earned a master’s degree in international studies, with a focus on Russian, East European, and Central Asian studies, from the University of Washington (UW) in 2015. She also has a master’s degree in history from Texas A&M University from her previous career as a school teacher. She has high-intermediate fluency in Russian.
While at UW, Sarah worked as a publications editor and special projects assistant for her department. She also served as secretary of the UW chapter of the Institute for Nuclear Materials Management in 2014, before her nomination for chapter president through 2014-2015. In June 2015, she was awarded the Daniel C. Waugh Award for Best Thesis, titled The Competition for the Ukrainian Nuclear Fuel Cycle: Rosatom, Westinghouse, and the Future of Nuclear Energy in the Near Abroad.

Sarah’s other awards include the UW Top Scholar Fellowship, the H. Stewart Parker Endowed Fellowship, and the Foreign Language Area Studies Fellowship. She also completed the Slade Gorton International Policy Center Global Leadership Program with the National Bureau of Asian Research, and she was presented with the Sally Gorton Leadership Award at the conclusion of the program.

In her fellowship, Sarah spent three months in the Administrator’s Office of Policy organizing a high-level event commemorating 20 years of successful stockpile stewardship. When she transitioned to the State Department in October 2015, she began to focus on peaceful nuclear cooperation and diplomacy. She assisted with the negotiation and management of 123 agreements, Nuclear Suppliers Group diplomacy, and initiatives on the global competitiveness of U.S. nuclear energy vendors. She served as a member of U.S. delegations to the Nuclear Suppliers Group in Vienna and the Quadripartite Group of Experts in Sydney, Australia.

In June 2016, Sarah began the next chapter of her career in international nuclear cooperation with NNSA Defense Programs, Office of Research and Development.

Joshua Merritt
NA-141 Office of Strategic Planning
Washington, D.C.

Joshua Merritt has a combined technical and policy background, with master’s degrees in both mechanical engineering and public policy (emphasis in energy and renewable energy policy) from Oregon State University. His work focused on alternative energy and hybrid energy systems and the social interactions and policies that affect them.

While at Oregon State University, Joshua gained hands-on experience as a student marine technician at Oregon State University’s College of Earth, Oceanic, Atmospheric, and Sciences where he worked closely with marine technician and research faculty. He also worked as a graduate teaching assistant for the Department of Economics and Mechanical Engineering and completed a Western State Renewable Energy Study involving coding periodical articles surrounding wind energy projects in the western states.

Joshua also gained practical technical engineering experience working as a laboratory technician at Brass Engineering in California, where he set up and executed tests related to pipeline design, including settling, shear stress, corrosion, and material tests. Following this, he pursued his bachelor’s degree in mechanical engineering at Ohio State University, where he worked as a student administrative assistant in the Department of Mechanical Engineering and completed projects in energy audits, power plant design, and systems design.

Adam Myers
DOE-IN-15 Office of Counterintelligence
Washington, D.C.

In May 2015, Adam Myers completed a Master of Arts in international relations and international economics at the Johns Hopkins School for Advanced International Studies (SAIS). He concentrated on strategic studies and earned a specialization in economic policy and proficiency in Arabic. Before moving to Washington D.C. to attend SAIS, he spent three years in the mortgage banking sector as a mortgage loan consultant. He also holds a Bachelor of Arts degree in international studies from Southern Nazarene University. Adam’s career interests focus on public service and the nuclear technology-energy-security nexus.
Throughout his academic career, Adam pursued internships in the U.S. government to learn about effective policy making and implementation. He completed an internship in the spring and summer of 2014 at the DOE in the African and Middle Eastern Affairs office, where he worked predominantly on energy security issues in Iraq after the ISIL offensive in June 2014. That year, he also interned at the Department of the Treasury in the Office of African Nations, researching the economic impact of Ebola and borrowing trends in Africa. Lastly, for the Department of State in 2015, Adam supported the Bureau of Near Eastern Affairs, where he focused on economic affairs in Iraq. Previously, Adam served as a research assistant with the American Academy of Diplomacy and supported public relations of the Think and Do charity organization in Egypt, where he completed a study abroad program in the fall of 2009.

Sarah Norris
NA-21 Office of Global Material Security
Washington, D.C.

Sarah Norris completed a Master of Arts in nonproliferation and terrorism studies at the Middlebury Institute of International Studies at Monterey, California in 2014. She also earned bachelor’s degrees in international affairs and Russian from the University of Georgia.

Beginning in 2012, Sarah served as a graduate research assistant with the James Martin Center for Nonproliferation Studies, where she utilized Russian sources to research and track defense and civilian bio-sector developments as well as to review and revise Nuclear Threat Initiative databases on nuclear facilities in the former Soviet Union. While at Monterey, Sarah also performed the duties of a project manager for the grant-funded Graduate Initiative in Russian Studies—a program that hosts distinguished practitioners and scholars from Russia, Ukraine, and Central Asia.

In 2014, Sarah spent seven months studying Russian language and interning at nonproliferation- and security-focused research centers in Moscow as part of the National Security Education Program Boren Fellowship. Sarah also interned at the Department of State in the Bureau of Arms Control, Verification, and Compliance and in the Nuclear Policy Program at the Carnegie Endowment for International Peace.

Prior to joining NGFP in 2015, Sarah served as a research aide in the Senate and participated in the Nuclear Scholars Initiative at the Center for Strategic and International Studies, which afforded her the opportunity to research the evolution of Russian public opinion on nuclear weapons and war.

Robert ‘Ty’ Otto
NA-241 Office of International Nuclear Safeguards
Washington, D.C.

Ty Otto earned his master’s degree in nuclear engineering from the University of Cambridge after completing undergraduate work in physics and political science at the University of Washington. His graduate research focused on modeling and optimizing the neutronic properties of a civilian marine reactor, devoting significant attention to clarifying the political, economic, and nonproliferation hurdles that would confront this type of technology development in the real world.

A Seattle native, he came to the NNSA from PNNL, where his work focused on IAEA safeguards, nonproliferation policy, and the economics of civil nuclear power.

Ty furthered his interests in the broader linkages between science and policy by volunteering at the House of Representatives, where he worked on legislative and budget issues relating to the environment, defense, and science.
Kaitlin Oujo  
NA-213 Office of Nuclear Smuggling Detection & Deterrence  
Washington, D.C.

Kaitlin Oujo completed a Master of International Affairs degree with a focus on international security at Columbia University’s School of International and Public Affairs in New York in 2015. She also has a bachelor’s degree in Middle Eastern Studies from The George Washington University’s Elliott School of International Affairs. She has been an Alice Stetten Fellow, Embassy of Israel Yitzhak Rabin Memorial Fellow, as well as a Harold W. Rosenthal Fellow in International Relations.

Kaitlin’s exposure to weapons of mass destruction security began as a graduate intern at the United Nations Peacekeeping in the Department of Field Support, which secures donations of weapons and other military equipment. After her work in the United Nations, Kaitlin worked in the Office of the Secretary of Defense on the Middle East team. Working on the Syria portfolio, she represented her program office at interagency synchronization meetings regarding Syrian chemical weapons.

Kaitlin also served as a volunteer election observer for Democracy International in Tanta, Egypt during the 2014 presidential election; a program assistant for the International Republican Institute’s Middle East team in Washington, D.C.; and an Arabic contractor for the Rendon Group, where she conducted translation of Libyan state and opposition media. She has intermediate proficiency in standard Arabic and elementary proficiency in French.

Most recently, Kaitlin worked in New York City’s Office of Emergency Management, where she assisted in emergency planning for a possible terrorist attack on the city’s fuel infrastructure. She also assisted with the management of the city’s chemical weapon antidote stockpile.

Valerie Pacer  
DOS-AVC-SSD State Department - AVC Strategic Stability & Deterrence  
Washington, D.C.

Valerie Pacer has wide-ranging foundational knowledge in international affairs, with a doctorate in international relations (2014) and a master’s degree in Russian studies (2011) from the School of Slavonic and East European Studies at University College London as well as a bachelor’s degree in diplomacy and foreign affairs and Russian, Eastern European, and Eurasian studies from Miami University (2009).

Valerie’s background is strongly focused on Russian politics and foreign policy, U.S. foreign policy, and arms control. Her graduate research examined Russia’s Euro-Atlantic security agenda and compared the policies of Russian presidents Vladimir Putin and Dmitry Medvedev. Her doctoral research served as the basis for her book, Russian Foreign Policy under Dmitry Medvedev, 2008-2012, which was published by Routledge as part of the BASEES/Routledge Series on Russian and East European Studies in 2015. While doing her doctoral research, she worked as a postgraduate teaching assistant, leading discussion seminars for undergraduate courses on Soviet and Russian foreign policy and Russian politics and society. Valerie has also conducted additional research projects related to arms control and nonproliferation.

Valerie completed two internships with the Department of State, one at the U.S. Mission to the Organization for Security and Cooperation in Europe in Spring 2010, where she was involved in U.S. efforts to promote nuclear nonproliferation, and one in Summer 2013 at Main State where she focused on issues of conventional arms control and also participated in interagency meetings about nuclear nonproliferation. In addition, she completed an internship with the Arms Control Association (ACA) during the summer of 2010; she supported ACA’s work promoting New START ratification as well as researched conventional arms control issues.
Jessica Paul
NA-22 Nuclear Nonproliferation Research & Development
Washington, D.C.

In 2015, Jessica Paul completed her Ph.D. in nuclear engineering at the Georgia Institute of Technology, where her research focused on nuclear forensics and safeguards applications. She was part of the university’s new concentration, Managing the Nuclear Enterprise. Her graduate work in analyzing gamma and neutron signatures emitted from special nuclear material in weapons stockpile storage contributed to an effort supported and funded by the Department of State.

Jessica’s interest in nuclear forensics grew from her experience as a participant in a Nuclear Forensics Summer School Program with the University of Nevada in Las Vegas. She was one of 10 students chosen to gain hands-on experience in nuclear forensics topics. In the program, she completed laboratory experiments involving alpha and gamma spectroscopy, mass spectrometry, and uranium/plutonium separation. She also chartered and became the president of the Institute of Nuclear Materials Management Student Chapter at Georgia Tech.

Jessica completed three internships at the Idaho and Oak Ridge national laboratories, where she gained first-hand experience in laboratory settings pertaining to nuclear forensics. She became familiar with the radiochemistry processes important to specific nuclear events. She also completed a Nuclear Forensics Graduate Fellowship, sponsored by the Department of Homeland Security, in which she supported the development of a low-cost method to quickly and reliably qualify and quantify radioisotopes contained in used fuel in order to strengthen safeguards protocols and support nuclear forensics applications.

Jason Portner
NA-24 Office of Nonproliferation & Arms Control
Washington, D.C.

Jason Portner began his studies at the Johns Hopkins School of Advanced International Studies (SAIS) with the goal of pursuing a long-term career in nuclear nonproliferation. Jason completed his master’s degree from SAIS (2015) with concentrations in China studies and international economics. Jason also has a bachelor’s degree in international relations from Northeastern University in Boston, MA (2011). He has advanced proficiency in Chinese combined with experience and education in international relations, China studies, and nuclear energy and nonproliferation.

Jason’s interest in nonproliferation grew from a desire to support the U.S. Government on policy issues related to the Asia-Pacific region. He moved to China and worked at the Beijing office of the Natural Resources Defense Council. In this role, he applied U.S. best practices in nuclear safety to advocate reforms to China’s nuclear safety regulatory system that were included in its 12th Five-Year Plan for Nuclear Safety. He also worked with a nuclear energy and nonproliferation portfolio at the DOE’s China Office.

Jason completed an internship with the International Trade Administration (ITA), where he worked with interagency and industry partners to implement U.S. civil nuclear export strategy. He drafted and researched ITA’s Civil Nuclear Top Markets for U.S. Exports to prioritize U.S. Government activities in the civil nuclear field and advised ITA and interagency partners on civil nuclear policy issues.
Sabrina Ragaller
NA-1.3 Office of Cost Estimating & Program Evaluation
Washington, D.C.

Sabrina Ragaller earned her master’s degree in global finance, trade, and economic integration at the Josef Korbel School of International Studies at the University of Denver in 2015. She also has a bachelor’s degree in international affairs and economics from the University of Georgia. She has intermediate fluency in Spanish.

Sabrina first became interested in the complexities of nuclear security through the Center for International Trade and Security’s Security Leadership Program. Working with nuclear security experts, she tackled projects ranging from an analysis of Indonesia’s energy portfolio to escorting international delegates during the center’s 2010 Export Academy.

Her continued interest in U.S. security policy placed her in an internship in the strategy office with the aerospace and defense contractor Rockwell Collins. She researched disruptive trends in the defense industry, crafted recommendations for company strategy, and updated competitive intelligence reports. As a Sié Fellow at the Korbel School, she worked as a research assistant tracking the growth of private security activities worldwide and served on the executive committee of the school’s Crisis Engagement and Negotiation Exercise. She also interned in the Colorado Department of Transportation’s new business analysis unit, which sought to provide data-driven recommendations for senior management.

Prior to graduate school, Sabrina worked in El Pomar Foundation’s competitive fellowship program and was chosen to direct and manage three programs: an international exchange for political leaders, a forum on local civic issues, and the reporting system for the foundation’s grant compliance efforts.

Merit Schumaker
NA-123 Office of Technology Maturation
Washington, D.C.

Merit Schumaker first encountered the history of the nation’s nuclear security while growing up in Santa Fe, New Mexico, where he was exposed to the historical Manhattan Project and its involvement with the Los Alamos National Laboratory (LANL). Merit later went to LANL for the summers of 2011 and 2012 in the Operational Support for Packaging and Transportation Division, where he worked directly with the procedures associated with the DOE.

In 2013, Merit was awarded a research assistantship funded by a grant through the Air Force Office of Scientific Research. Merit’s research focused on meso-scale computer simulations of the dynamic compaction of dry and saturated sand. He also wrote a paper comparing planar shock experiments of dry sand done at Georgia Tech to the computer simulations he performed with a hydrocode utilized and developed by the DOE during U.S. nuclear testing in the 1960s.

Aside from simulations, Merit also helped to perform planar shock and dart penetration experiments as a member of the shock physics laboratory at Marquette University. The experiments were part of a collaborative effort with Oceanit and the Defense Threat Reduction Agency. These types of experiments helped to better characterize the dynamic behavior of various materials, which is of direct interest to national security efforts of various government agencies. Merit completed a master’s degree in mechanical engineering at Marquette University in Milwaukee, Wisconsin in 2015.
Daniel Sharp  
**NA-123 Office of Technology Maturation**  
**Washington, D.C.**

Daniel Sharp originally joined NGFP in June 2014 as a fellow with NA-123, the Office of Material Management and Technology Maturation. Following a military deployment with the U.S. Navy Reserve, Daniel returned to NA-123 and completed his fellowship with the Class of 2015. Daniel is a Lieutenant Commander in the Navy and has a master’s degree in health physics from Georgetown University. He is currently pursuing a master’s degree in mechanical engineering.

Prior to his fellowship, Daniel Sharp worked for the Technology Maturation Division of NNSA’s Office of Defense Programs, first as a student program analyst and most recently as a technical support contractor through his employment with Leidos. Daniel supported NNSA in the development of program oversight, program direction and strategy, and technical analysis of scientific research and development, engineering, and production activities required for nuclear weapon systems. Prior to this role, Daniel served as an intern with the State Department Bureau of European Affairs in the Office of Policy and Regional Affairs.

Much of Daniel’s interest in national nuclear security stems from his service in the U.S. Navy. In 2009, Daniel completed the Naval Reactors’ training program and reported to the USS George Washington in Japan where he served as a reactor mechanical division officer. His work focused on nuclear power plant operations, including the control and disposition of associated radioactive materials. Upon completion of his service, Daniel joined the Navy Reserve while living in Moscow. He worked as an international relations officer for the U.S. European Command, assisting the Russia Desk Officer in Germany with planning and coordinating U.S.-Russian military engagements.

As an undergraduate at Abilene Christian University, Daniel supported a Russian-American research collaboration at Brookhaven National Laboratory by working directly with Russian particle physicists measuring the properties of elementary particles. He also spent a semester in Russia at Moscow State University where he became fluent in Russian.

Bryan Sims  
**NA-113 Office of Defense Programs Research & Development**  
**Washington, D.C.**

Bryan Sims received his doctorate from the School of Nuclear Engineering at Purdue where he also completed his master’s and bachelor’s degrees.

Nonproliferation was Bryan’s primary concentration throughout his graduate studies. He first developed computer simulations for the identification of special nuclear materials arriving in the United States via cargo containers. Building on this, in a partnership with the International Safeguards and Security Group at the Idaho National Laboratory, Bryan established a nonproliferation course for freshman students to promote the field at an early stage of career development. In part because of his success in this initiative, he received Purdue’s Magoon Award for Excellence in Teaching. For his doctoral dissertation, he looked at using Russian fusion technology to meet U.S. treaty obligations concerning plutonium disposition. His early-career experience with Los Alamos National Laboratory’s Advanced Reactor Design Team has been instrumental in this most recent effort.
Having worked in both Senator Richard Lugar’s Personal Office and the Senate Foreign Relations Committee Office, Bryan appreciates the integral role policy plays in furthering the nonproliferation mission. He refined this skill set through involvement with Purdue’s Global Policy Research Institute. Bryan took a leadership role in a collaboration between Purdue University and a consortium of Colombian universities to introduce photovoltaic power systems into impoverished communities. Drawing on these experiences, Bryan pursued a regional expertise in East Asia through education, travel, and cultural immersion to provide local perspectives of nonproliferation issues.

Corey Edward Smith
NA-00-LAFO Los Alamos Field Office
Los Alamos, NM

Corey Edward Smith graduated from Dublin City University with a master’s degree in international security and conflict diplomacy in 2015. He also has a bachelor’s degree in biology with a concentration in ecology and evolutionary biology.

Corey brings to his fellowship a background in ecology and environmental studies combined with international relations, which he transformed into ongoing research interests and a dissertation in nonproliferation and discourse relating to nuclear diplomacy. During his studies in Ireland, he participated as the American Student Ambassador in the 2013 Northern Ireland Peace Talks held at Dublin Castle where he supported parallel roundtable diplomacy that led directly to numerous official policy changes. He also served as the International Partnership Liaison between the Institute for Nuclear Security and the Institute for International Conflict Resolution and Reconstruction at Dublin City University. Corey is a U.S. Coast Guard Merchant Marine, Captain of Near-Coastal Uninspected Passenger Vessels. He is professionally proficient in various dialects of Spanish.

Temica Stewart
NA-APM-ABQ Office of Acquisitions & Project Management
Albuquerque, NM

Temica Stewart’s background spans project management, public administration, law, and leadership training. In 2010, she completed a master’s degree in criminal justice at the University of North Texas followed by a master’s degree in management at Texas A&M University in 2014.

While at Texas A&M University, Temica worked as a senior office associate in the Office of Graduate Studies, where she helped with the secure management of official records for more than 10,000 graduate students. In 2014, Temica was selected by campus administration to participate among top students in the National Society of Leadership and Success, Sigma Alpha Pi Honor Society.

For more than 13 years, Temica worked as a paralegal and legal assistant in Texas. Her responsibilities included researching case law and public records and providing assistance to attorneys in various areas of the law including labor employment, commercial litigation, creditor litigation, transportation, and family law. Temica also has experience with improvement initiatives such as International Standards Organization Quality Security Standards, Six Sigma, and Strategic Quality Management.

Temica currently works as a contract specialist at NNSA’s Office of Acquisition Management and completed her Level I Federal Acquisition Certification in Contracting.
Tracey-Ann Wellington

NA-242 Office of Nuclear Export Controls
Washington, D.C.

Tracey-Ann Wellington received her doctorate in energy science and engineering from the University of Tennessee, Knoxville (UTK) in May 2015. She holds a Bachelor of Science degree in mathematical physics from Randolph College in Virginia and a Master of Science degree in materials science and engineering from Texas A&M University. She also received the Nuclear Security Science and Analysis Graduate Certificate from UTK in recognition of her accomplishments in research and coursework.

Tracey conducted her dissertation research, in collaboration with the Nuclear Materials Detection and Characterization group at Oak Ridge National Laboratory (ORNL), on developing advanced measurement methods for detection and characterization of nuclear weapons. In 2014, she worked on an independent research project at ORNL, studying the policy and economic impacts of the food and energy technology industry, the findings of which were published in a peer-reviewed journal article.

Tracey was selected to participate in the 2014 Nuclear Engineering Student Delegation in Washington D.C., where she and her team met with officials from the DOE, the Department of State, the Nuclear Regulatory Commission, and Congress to advocate for sustained support of nuclear engineering education. She also serves as one of two student representatives on the Tennessee Valley Authority Nuclear Plan Community Panel.

Tracey has worked in a variety of sectors in countries such as Japan, South Korea, and the United Kingdom. Tracey was selected for the competitive DOE Scholars Program, where she supported a variety of activities within the Office of Innovative Nuclear Research. She also served as policy intern in the Department of Commerce Office of Western Europe.

Ronnie Williams

NA-APM-ABQ Office of Acquisitions & Project Management
Albuquerque, NM

Ronnie Williams earned a master’s degree in public administration and policy (2015) and a bachelor’s degree in sports management (2011) from the University of Georgia. Ronnie’s interest in policy stems from his experience as a middle school mathematics teacher within a public school district as well as a director in parks and recreation, positions in which he realized the importance of policy development and implementation.

Since 2013, Ronnie has worked as a recreation administrator/director with the Oglethorpe County Board of Commissioners. In this role, he planned, developed, and directed department programs, services, resources, and staff. He was also tasked with developing policies and procedures and ensuring compliance of operations. Ronnie also worked as a middle school math teacher for the Chatham County Board of Education, a health and fitness supervisor for the 21st Century Community Learning Center/YMCA of Coastal Georgia, and an intramural sports supervisor with the University Georgia. These roles helped him develop an understanding of and career interest in program management, public safety, and policy analysis.

Ronnie spent his tenure in NGFP within the NNSA Acquisitions and Project Management Office. As a contracting specialist, he collaborated with a team that awards and manages between $11-13 billion worth of contracts and $3.6 billion worth of interagency agreements. In turn, he gained valuable experience in the field of contracting/procurement. His daily duties included soliciting bids to procure supplies as well as administering contract and interagency agreement awards. He also applied price/cost analysis techniques to secure the most fair and reasonable bargain for the government and close out contracts where necessary in the most efficient manner.
Fareed Yasin
NA-00-PTEX, NA-00-Y12
NNSA Nuclear Production Office at Pantex Amarillo, TX & Y12 Oak Ridge, TN

Fareed Yasin completed his bachelor's and master's degree in nuclear engineering from the University of Tennessee (UT) in 2014. He also demonstrated his ability to engage in research and development of new tools and processes related to nuclear security, earning him a graduate certificate in nuclear security sciences and analysis. During his time as a master's student, his research focused on nuclear-specific issues relevant to the Middle East. He is fluent in Arabic.

Yasin completed his graduate research at the Institute of Nuclear Security (INS). His time at the INS was instrumental in developing a greater awareness of the policy process and geopolitical implications. In the summer of 2014, Yasin helped to host a workshop involving more than 30 international students from India, Indonesia, Jordan, and Morocco. Funded by the Department of State’s Partnership for Nuclear Security, the workshop included touring both Oak Ridge National Laboratory and UT facilities and laboratories, along with nuclear-centric exercises and talks.

Previously, Yasin was involved in the Institute of Nuclear Materials Management, where he served as the vice president of the UT student chapter. He fostered student engagement with several universities in the MENA region as well as leading research endeavors that were later presented at conferences with his international counterparts.

Yasin completed a co-op position as a nuclear core design engineer with Dominion Power in Virginia, where he translated his theoretical understanding of reactors into practice and gained valuable technical experience working in the control room supporting Surry Power Plant’s refueling outage. Also, Fareed had the opportunity to work with the Nuclear Analysis and Fuel Department at Dominion Headquarters, which facilitated his understanding of industry standards, radiological and environmental hazards, and reactor physics that govern nuclear core performance. Afterward, he served as a Dominion Corporate Ambassador.
Building future leaders in nuclear security and nonproliferation

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