DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

PACIFIC NORTHWEST NATIONAL LABORATORY

operated by

BATTELLE

for the

UNITED STATES DEPARTMENT OF ENERGY

under Contract DE-AC05-76RL01830

PNNL-19171-4
Mission Driven: It’s all about results

In 2009, the Nonproliferation Graduate Fellowship Program’s (NGFP’s) Standard Operations and Procedures Manual established the program’s Guiding Principles that solidify the foundation of the program’s success. Chief among those is the purpose of the NGFP:

**Purpose:** The program’s single purpose is to produce exceptional leaders who will build and strengthen the nation’s leadership in nonproliferation and international security in alignment with the mission of the National Nuclear Security Administration (NNSA).

This mission is measured into every aspect of the program. It starts with recruiting: broadening awareness of career opportunities in nonproliferation; increasing visibility of the NNSA’s mission; and attracting outstanding technical and policy-focused graduate students who have a genuine care for nuclear nonproliferation and national security. Fall 2009 saw record-setting recruitment results in the number of applications and technical candidates (see Recruiting Results, page 21). The quality of the applicants was also excellent, reflected in the performance of the Fellows—from completing the removal of HEU in Chile, to working the Nuclear Security Summit Tiger Team and the DOE Backstopping Committee for the START follow-on treaty.

Another way the NGFP strives to support the mission is through engagement with the nonproliferation community at large. Multiple career development events are arranged to help the Fellows connect with professionals in every sector. In 2009, the NGFP added informational interviews to one such event, with admirable remarks from the invited participants about the caliber of the Fellows (see Career Development, page 10).

In the end, the most rewarding recognition of mission accomplishment is seeing the NGFP alumni rise to the call of leadership. As the NGFP matures, more and more former Fellows are influencing significant advances in nonproliferation (see Alumni Highlight, pages 16-17).

The NGFP’s increasing support to Program Offices – from 11 Fellows hired in 2007 to 25 Fellows hired in 2010, and broadening support to Public Affairs, DOE-China, and DOE-IN – is a gratifying reflection of the program’s growing value to the Office of Defense Nuclear Nonproliferation. From recruiting the best to connecting with alumni, our goal is to continue to provide exceptional value to the offices served by the NGFP and support the mission of the NNSA.

Phyllis Byrd
Federal Program Manager
National Nuclear Security Administration

Jana Fankhauser
PNNL Program Manager
Pacific Northwest National Laboratory
Introduction

The Nonproliferation Graduate Fellowship Program (NGFP) is a National Nuclear Security Administration (NNSA) program with a mission to cultivate future technical and policy leaders in nonproliferation and international security. Through the NGFP, outstanding graduate students with career interests in nonproliferation are appointed to Program Offices within the Office of Defense Nuclear Nonproliferation (NA-20). During their one-year term, Fellows participate in programs designed to detect, prevent, and reverse the proliferation of nuclear weapons.

The NGFP’s success is measured by its effectiveness at:

- Promoting awareness of careers in nonproliferation at the NNSA and U.S. Department of Energy (DOE) national laboratories.
- Providing participants with specialized training and valuable practical experience in the field of nonproliferation.
- Aiding the NNSA in achieving its mission.
- Developing a talent pool to support the NNSA’s international security and nonproliferation programs.

From June 2009 through May 2010, the NGFP met and exceeded each of those objectives.

The NGFP is managed through the NA-20 Office of International Operations, and is administered by Pacific Northwest National Laboratory (PNNL). The unified approach of the Federal Program Manager, Phyllis Byrd, and PNNL Program Manager, Jana Fankhauser, ensures mission accomplishment by sharing the same vision and administering the program within the same framework. Together, they formulated and implemented several improvements during the year reported herein, including:

- A renewed recruitment strategy and the overhaul of recruitment materials, broadly increasing awareness and recognition of the NGFP program and NNSA’s mission, with excellent recruitment results.
- Vast improvements to Interview Week, which involved 141 interviews among 19 offices for 65 candidates.
- Enhancements to Orientation to better prepare the incoming Class of 2009.
- An updated team structure, improving efficiency and ensuring continuity.
- A new career development strategy that resulted in excellent feedback from invited participants and the Fellows.
Structure of The NGFP

The operational structure of the NGFP is organized into five program elements: Program Management, Recruitment, Selection and Hiring, Orientation and Training, and Management of the Fellows.

As the program managers continually review NGFP operations, roles and responsibilities are adjusted. As a result, this was a year of transition for the NGFP Team. To ensure the program’s continuity, PNNL developed a succession plan with the role of Deputy Program Manager, fulfilled by Clarissa Berkman. Additionally, the role of Financial Specialist is now being fulfilled by a team member with dual capabilities, Jenna Larson, in addition to her role as Operations Manager. The team also welcomed Terry Conklin as the new NGFP Administrator. These updated team roles are reflected in the chart below:
Program Management Highlights

In 2009, the NGFP continued its outstanding program management and administration, demonstrated in several ways.

- In 2009, the NGFP grew in size, increasing from 24 to 25 Fellows, and, for the first time ever, an NGFP Fellow was placed in NA-1: Office of Public Affairs. Furthermore, the Fellows demonstrated extensive support of the mission of the NNSA and their offices. This was reflected in part by the amount of requests from Program Offices for foreign travel by the Fellows.

- Meeting one of its most critical requirements, the NGFP continued to expertly facilitate the processing of security clearances, improving even still beyond the previous year’s excellent results. Drug testing for the Class of 2010 was completed by January 29, 2010. (The Class of 2009 was completed by February 9.) Clearance packets were submitted to DOE Chicago by February 15 (compared to February 12). And, for the Class of 2010, 23 out of 25 clearances were granted by the time the Fellows arrived in Washington, D.C. (compared to 22 out of 24).

- Interview Week, one example of several improvements for the year, implemented a new customized scheduling application that seamlessly facilitated the scheduling and updating of 141 interviews.

A display was developed to hang in NNSA Headquarters, to help convey the mission and impact of the program. The poster included information about the Fellows’ experiences, their accomplishments, and recent program innovations.

“Thanks for continuing to make the NA-20/PNNL team look great on anything and everything associated with the NGFP. Achieving excellence is difficult enough; sustaining excellence takes significant effort. You’ve done both. I’m proud to be associated with you and your program.”

Nick Carlson
NA-20 Office of International Operations
The Annual Lifecycle

Each year, the NGFP’s annual lifecycle involves administration, implementing, and planning phases for three different fellowship classes: administering the current class of Fellows, recruiting and hiring the next class, and recruitment planning for the future class. This annual report covers program activities from June 2009 through May 2010, organized by class.

- For the Class of 2009, this report covers their entire fellowship term (June 2009 through May 2010), including their orientation, their accomplishments and career development activities, and the class’s closing ceremony.

- For the Class of 2010, this report covers the recruitment of that class (through the October 2009 deadline), their interviews in December 2009, and their hiring in early 2010.

- For the Class of 2011, the report covers recruitment strategy, planning, and scheduling efforts through spring of 2010.

“This NGFP is absolutely vital to our office’s mission success. Every year, the program provides us with two to three bright, talented, motivated individuals who immediately take on substantive projects and duties that directly further our office’s efforts.”

Jeff Chamberlin
NA-212 Office of European and African Threat Reduction

This graphic illustrates the time of year when each program element has a focus. It also outlines how three different fellowship classes are administered to in a single year.
Class of 2009

Incoming Fellows

The fellowship term for the Class of 2009 began in June 2009. The number of Fellows hired was 24, three more than in the preceding year. This continues the growth trend that started in 2007 with 11 Fellows, demonstrating the program's increasing value to the NA-20 Program Offices.

In all, the Class of 2009 represented 12 universities:

- American University (3 Fellows)
- Columbia University
- George Mason University
- George Washington University (3)
- Georgetown University (5)
- John Hopkins University
- Monterey Institute of International Studies (2)
- Oregon State University
- Texas A&M University
- The Ohio State University (2)
- University of Denver (3)
- University of Florida

The Class of 2009 toured the Hanford B Reactor during Orientation. From left to right: (standing) Mark Murphey, Marcy Fowler, Mark Ballantyne, Kirsten McNeil, Mark Niehus, Greg Dupuy, Ryan Taugher, Ashley Nilsen, Andy Hallock, Jeff Lindemyer, Temeka Taplin, Gretchen Smith, Bill Moore, Sarah Soisson, Wesley Becks, Anna McFadden, David Peranteau, Angela Beane, Rob MacQuigg, (kneeling) Tiffany Blanchard, Melissa Scholz, Lindsey Gehrig, Bryan Reed, and Dan O’Hara.
Orientation

Orientation is designed to prepare the Fellows for success in their new roles, and introduces them to the NGFP, the NNSA, and the DOE. It includes several intense days of administrative processes, tours of nuclear reactors and energy plants, roundtables with seasoned experts, training in the field, visits to specialized laboratories, and meetings to familiarize them with their assigned Program Offices. To accomplish this, the NGFP implements Orientation in two parts: the first part is at PNNL in Richland, Washington, and the second part is at NNSA Headquarters in Washington, D.C.

In 2009, the first part of Orientation fully leveraged the history, facilities, and expertise at PNNL. The Class of 2009 received interactive walking tours of the 300 Area (where they were briefed on technologies that support the NNSA nonproliferation mission), the Hanford Site/B Reactor, and the Energy Northwest nuclear power plant. Fellows received hands-on training, using instruments in the field, at the Volpentest HAMMER Training Facility. The Fellows also learned about weapons of mass destruction (WMD) history and technology as they heard first-hand about how PNNL aids the NNSA in its mission. To emphasize the complexity of policy issues, the Fellows also participated in three roundtables:

- “Reducing the Threat of Radiological and Nuclear Terrorism,” a panel discussion with PNNL experts on Global Threat Reduction Program; Second Line of Defense; Export Control, Materials, Control, Protection, and Accounting; and The Next-Generation Safeguards Initiative (NGSI).
- “The Future of Nonproliferation: The Next Five Years,” a moderated session teaming Fellows with PNNL staff to lead discussions on Iran/DPRK: Priorities in the Next 2-3 Years; IAEA: Increase their Budget; Assured Fuel Cycle; NPT 2010: What will it bring us?; and The Path to a World Free of Nuclear Weapons.
- A mock Senate Hearing, “Should the U.S. Government Support Nuclear Energy Development?,” with Fellows representing the Committee on Foreign Relations, the Committee on Energy and Water, the Committee on Environment and Public Works, and the Armed Services Committee.

For the second part of the 2009 Orientation, Fellows traveled to Washington, D.C. At the NNSA Headquarters, they received briefings from the NA-20 Program Offices, NA-10, and Senior NNSA management, including Kenneth E. Baker, Principal Assistant Deputy Administrator for Defense Nuclear Nonproliferation, and Steven Black, Chief Operations Officer for Defense Nuclear Nonproliferation. On the first day, Deputy Secretary of Energy, Daniel Poneman,
and the Under Secretary for Nuclear Security and NNSA Administrator, Thomas D’Agostino, met and congratulated the Fellows on the start of their new assignment.

To better engage and prepare the incoming Fellows, the NGFP strives to update Orientation every year. In 2009, feedback from the Fellows indicated that Orientation continues to improve year-over-year.

• Very good, panel was well prepared to field a broad spectrum of questions, cannot have been easy for them. Thanks!
• The tour guides were all very knowledgeable. It was very good.
• The presenters were very well prepared and their role-playing was enthusiastic. Very fun.
• I continue to be impressed by the amount of work that goes into prepping us for the fellowship—thanks for everything!

Immediately following the Orientation at NNSA Headquarters, Fellows began working. The Class of 2009 Fellows and their assigned Program Offices were:

**Mark Ballantyne**, NA-242: Office of Global Security, Engagement and Cooperation

**Angela Beane**, NA-25: Office of International Material Protection and Cooperation

**Wesley Becks**, NA-242: Office of Global Security, Engagement and Cooperation, Global Initiatives for Proliferation Prevention Team


**Gregory Dupuy**, NA-24: Office of Nonproliferation and International Security

**Marcy Fowler**, NA-26: Office of Fissile Materials Disposition


**Andy Hallock**, NA-1: Office of Public Affairs

**Jeff Lindemyer**, NA-212: Office of European and African Threat Reduction

**Rob MacQuigg**, NA-212: Office of European and African Threat Reduction

**Anna McFadden**, NA-20: Office of Defense Nuclear Nonproliferation

Fellows are challenged to bring their best debate skills to the table during the mock Senate Hearing. Here, Ryan Taugher makes his point.
At the Volpentest HAMMER Training Facility, Fellows hear about the potential impact of nuclear weapons of mass destruction and see a dismantled Russian warhead up close. Also at HAMMER, Fellows learn how to use instrumentation in the field to detect nuclear material.

Kirsten McNeil, NA-242: International Nuclear Safeguards and Engagement Program

Bill Moore, NA-241: Office of Dismantlement and Transparency

Mark Murphey, NA-22: Office of Nonproliferation Research and Development

Mark Niehus, NA-213: Office of FSU and Asian Threat Reduction


Daniel O’Hara, NA-255: Office of National Infrastructure and Sustainability


Bryan Reed, NA-211: Office of North and South American Threat Reduction

Melissa Scholz, NA-243: Office of International Regimes and Agreements

Gretchen Smith, NA-243: Office of International Regimes and Agreements

Sarah Soisson, NA-22: Office of Nonproliferation Research and Development

Temeka Taplin, NA-211: Office of North and South American Threat Reduction

Global Support of the Mission

Reflecting the Program Offices’ continually growing reliance on the Fellows to help them in their missions, the Class of 2009 travelled more than any preceding class (as did the Class of 2008). By the end of their fellowship term, the Fellows’ travel totaled 135 trips; nearly one-third of the trips were international. In all, the Fellows’ travel included 93 domestic destinations, and 42 international trips.

Foreign destinations included 22 countries:

- Argentina
- Colombia
- Jordan
- Singapore
- United Arab Emirates
- Austin
- England
- Kazakhstan
- South Korea
- Uruguay
- Belgium
- Hungary
- Morocco
- Turkey
- Uzbekistan
- Chile
- Israel
- Paraguay
- Ukraine
- China
- Italy
- Russia

The Class of 2009 Fellows had a chance to meet and have a photograph taken with the Secretary of Energy and his wife at the DOE holiday party. From left to right: Dr. Jean Chu, Fellows Mark Murphey, Kirsten McNeil, Marcy Fowler, Sarah Soisson, Ryan Taugher, Anna McFadden, Andy Hallock, and Secretary of Energy Steven Chu.

Fellow Melissa Scholz traveled to Abu Dhabi in March 2010, where she attended the IAEA International Conference on Human Resource Development for Introducing and Expanding Nuclear Power Programmes, and she presented her paper on NNSA’s work to cultivate the next generation of safeguards professionals through the NGSI Human Capital Development Program.
Career Development

The NGFP is committed to creating opportunities for the Fellows’ career advancement in fields related to nonproliferation. To that end, career development-oriented events are provided each year. These events feature a panel of experts from various laboratories and sectors who specialize in different aspects of nonproliferation. To help them connect their interests, the participants and Fellows receive each others’ biographical sketches in advance of each event.

The first event, a National Laboratory Roundtable, was conducted October 15, 2009, at the Battelle Washington Office. In a panel-discussion format, representatives from DOE National Laboratories spoke to the Fellows about their career paths and how their current work contributes to the mission of the NNSA. Fellows were then able to ask candid questions about career advice or work at the laboratories. Panelists included:

- **Julie Canepa**, Group Leader for International Threat Reduction in the Nuclear Nonproliferation Division, Los Alamos National Laboratory
- **Cary Crawford**, Technical Group Manager for the Physical Protection Implementation Group at Pacific Northwest National Laboratory
- **Mona Dreicer**, Program Leader for Nonproliferation, International Security and Safeguards in the Global Security Principal Directorate at Lawrence Livermore National Laboratory
- **Pete Heine**, Manager, Technical Nonproliferation Policy Support, Argonne National Laboratory
- **Alan S. Icenhour**, Director, Global Nuclear Security Technology Division, Oak Ridge National Laboratory.

“It was a privilege and honor to be able to take part in this workshop. If you ever need someone to defend the budget for this program, please call on me.”

Mary Alice Hayward, Director of Strategy North America for AREVA

Nearly the entire Class of 2009 attended the Career Networking Workshop, seated here with Karen Henderson on the far right, and Mary Alice Hayward next to her.
The second career event was a newly innovated format, and took place on March 31, 2010, also at the Battelle Washington Office. This “Career Networking Workshop” was particularly successful, and involved experts from a variety of sectors in the field of nonproliferation. Participants included:

- **Mary Alice Hayward**, Director of Strategy North America for AREVA
- **Richard Goffi**, Booz Allen Hamilton Principal, and Senior Consultant Aiste Ray (NGFP alumnus)
- **Mark Hewitt**, Senior Vice President for Strategy, QinetiQ
- **Karen Henderson**, Senior Level Foreign Policy Advisor, Office of International Programs, Nuclear Regulatory Commission

After presenting a brief overview of their career paths and organizations, the participants provided one-on-one interviews with the Fellows. Nearly 50 individual informational interviews were conducted, and while the NGFP Fellows greatly appreciated the remarkable opportunity to meet with these established professionals, the response from the participants was extraordinary: every visitor commented on their impression of the caliber and quality of the Fellows.

**Performance Highlights**

Part of developing strong nonproliferation leaders is ensuring that they have an understanding of both policy and technology. To best support that effort, the NGFP begins by recruiting the brightest graduate students. The NGFP then offers policy-focused Fellows the opportunity to learn the technical realities of nonproliferation, while providing technical Fellows substantial policy experience.

The Class of 2009 exemplified that integrated approach in their outstanding work that obtained recognition throughout the fellowship term. Bryan Reed and Mark Niehus both supported the completion of the highly enriched uranium (HEU) removal from Chile, which made...
South America essentially HEU-free: a highly technical operation that accomplished a significant policy goal.

Several Fellows described these other highlights:

- David Peranteau was on the Nuclear Security Summit Tiger Team. To him, “the time pressures and the importance of the work infused the room with an infectious sense of purpose that made completing even the most banal tasks feel particularly rewarding.”


- Bill Moore was tasked to be on the DOE Backstopping Committee for the START follow-on treaty. In his words, “I felt extremely fortunate to be able to participate – it’s a historic event in the nonproliferation world and I was very excited to be involved.”

- Andy Hallock worked with a colleague on a National Geographic Explorer episode, “Inside the Nuclear Threat,” that briefed viewers on the physics of nuclear weapons and the threat potential, prevention, and response.

- Melissa Scholz said, “If I am being totally honest, the highlight of my year was the opportunity to work with the people on my team and the other Fellows. Second to that, being asked to travel to the UAE to present the work of my office at a conference was pretty cool!”

“The real highlight of my year is the sum total of my collective experiences: personal and professional growth, a deeper understanding of nuclear security challenges, greater appreciation for the complexity of policy making, and continual affirmation that an open attitude, an inquisitive mind, a grateful heart and the willingness to work hard always pays off. All of these things have cultivated and confirmed my desire to continue a career in civil service.”

Lindsey Gehrig, Class of 2009
Closing Ceremony

The NGFP provides excellent learning opportunities—experiences that simply cannot be found anywhere else. The theme of the Closing Ceremony on June 2, 2010, encouraged the Fellows to take those experiences and strengthen the nation's leadership; to build on what they learned and broaden the nonproliferation community.

The ceremony was extremely well attended by NNSA leadership and Program Office supervisors. Opening remarks were delivered by Mark Whitney, Assistant Deputy Administrator for NA-24: Office of Nonproliferation and International Security.

At the Closing Ceremony, the Fellows gave a presentation to describe their successes and challenges over the fellowship year. The presentation included appreciation for their mentors and colleagues—including a very special thank you to the departing NGFP Administrator, Gail Breneman—as
Mark Whitney delivered opening remarks for the Class of 2009 Closing Ceremony.

The audience enjoyed a few chuckles as the Fellows gave a very creative presentation.

Phyllis Byrd welcomed Gordon Dudder from PNNL to the ceremony.

well as descriptions of their various experiences. To measure their success, the Fellows creatively presented several statistics that summed up their year:

- 57 workshops attended
- 71 visits to 11 laboratory sites: PNNL, LLNL, ANL, Y-12, NTS, LANL, ORNL, BNL, Sandia, Pantex, SRS
- 2,478 meetings attended
- 542,544 emails sent
- 27 factsheets updated
- 493 talking points written
- 1,684 taskers handled

“Working with smart, competent, friendly people makes all the difference in any job, and it is what made my year not just a great opportunity, but a really great experience.”

Melissa Scholz
Class of 2009
Where They Are Now

Following their fellowship term, the Class of 2009 Fellows successfully moved forward in their careers to federal employment at several NA-20 Program Offices and a variety of other positions in civil and foreign service, national security, policy, analysis, and management.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Ballantyne</td>
<td>NA-242 Contractor</td>
</tr>
<tr>
<td>Wesley Becks</td>
<td>University of Denver – Master’s Completion</td>
</tr>
<tr>
<td>Tiffany Blanchard</td>
<td>NA-21 Federal</td>
</tr>
<tr>
<td>Greg Dupuy</td>
<td>IAEA Dept of Safeguards – JPO (Open Source)</td>
</tr>
<tr>
<td></td>
<td>Analyst</td>
</tr>
<tr>
<td>Marcy Fowler</td>
<td>Alfa Fellow – Moscow, Russia</td>
</tr>
<tr>
<td>Lindsey Gehrig</td>
<td>NA-24 Contractor</td>
</tr>
<tr>
<td>Andy Hallock</td>
<td>NNSA Future Leaders Program</td>
</tr>
<tr>
<td>Anna McFadden</td>
<td>National Aeronautics and Space Administration</td>
</tr>
<tr>
<td>Kirsten McNeil</td>
<td>NNSA Future Leaders Program</td>
</tr>
<tr>
<td>Bill Moore</td>
<td>Lawrence Livermore National Laboratory</td>
</tr>
<tr>
<td>Mark Murphey</td>
<td>Office of Secretary of Defense – Presidential</td>
</tr>
<tr>
<td></td>
<td>Fellow</td>
</tr>
<tr>
<td>Mark Niehus</td>
<td>Pacific Northwest National Laboratory</td>
</tr>
<tr>
<td>Ashley Nilsen</td>
<td>Sandia National Laboratories</td>
</tr>
<tr>
<td>Dan O’Hara</td>
<td>Foreign Service – Asia</td>
</tr>
<tr>
<td>David Peranteau</td>
<td>NA-241 Contractor</td>
</tr>
<tr>
<td>Bryan Reed</td>
<td>NA-21 Federal</td>
</tr>
<tr>
<td>Melissa Scholz</td>
<td>NA-24 Federal</td>
</tr>
<tr>
<td>Gretchen Smith</td>
<td>NA-24 Contractor</td>
</tr>
<tr>
<td>Sarah Soisson</td>
<td>Sandia National Laboratories</td>
</tr>
<tr>
<td>Temeka Taplin</td>
<td>NA-21 Contractor</td>
</tr>
<tr>
<td>Ryan Taugher</td>
<td>Department of State Contractor</td>
</tr>
</tbody>
</table>

“There is no doubt that the relative success I’ve had in my new job at the State Department’s Partnership for Nuclear Security, working to establish new collaborations between inter- national nuclear technical experts in support of nuclear security best practices, is a direct result of my time as an NGFP Fellow.”

Ryan Taugher
Class of 2009
Alumni Highlight

Mission Success: Exceptional Leaders from the NGFP

To impart the experience and expertise required for leadership in nonproliferation, the NGFP awards graduate students one year fellowships within NA-20 offices. More than 150 alumni continue to apply their valuable NNSA experiences at agencies and organizations worldwide, and the NNSA alone now employs more than 50 NGFP alumni as office directors, program managers, and team leaders.

Christine Buzzard, Executive Director of the DOE Moscow Office (DOE-M), graduated in 1999 and was the first alumnus to reach Senior Executive Service. She now directs DOE-M’s support of DOE and NNSA cooperative programs in the Russian Federation. Her experience as an NGFP Fellow in the same office she now leads was invaluable to understanding the roles of the various agencies in nonproliferation and developing contacts throughout the U.S. government.

Elena Thomas graduated the NGFP in 2000, and has been the Director of the DOE-Vienna Office and Energy Attaché at the U.S. Mission to International Organizations in Vienna (UNVIE) since November, 2009. Ms. Thomas serves on an interagency team reporting to the Ambassador to UNVIE, and she is primarily responsible for IAEA safeguards issues, but covers a myriad of other issues involving the IAEA. Before the UNVIE, she had worked on U.S.-Russia bilateral nonproliferation programs for the previous ten years, with two other positions overseas in Moscow and briefly in Tokyo.

Jill Zubarev, also a 2000 graduate, serves as the Science Attaché for Nuclear Security at the UNVIE. Ms. Zubarev has experience working in several NA-20 offices (NA-24, NA-25 and NA-21) as a project lead, action officer, and manager. While in the NGFP program, she traveled to Almaty for meetings on the BN-350 Project and to Vienna for trilateral negotiations with the IAEA and Russia on starting the Russian Fuel Return Program. Ms. Zubarev credits these experiences and her mentors at DOE/NNSA for helping her to build a robust career in nonproliferation at DOE/NNSA.
Since its 1995 launch, the annual class size has grown from three fellows to 26. By staying focused on its mission to develop leaders out of the nation’s best graduate students who seek careers in nonproliferation, the program’s successful legacy—and successful nonproliferation efforts—will continue far into the future.

“The NGFP program is an excellent way for young professionals to get their foot in the door to start careers in nonproliferation. My experience was extremely valuable as I spent my time at the DOE-Moscow Office. That experience gave me a birds-eye view of all of our U.S.-Russia programs, and I was able to learn a lot of the programs, key issues, and major players in both the U.S. and Russia. I also supported a number of high-level negotiations and at the working level, which helped me understand what worked and what didn’t work. This was extremely useful when I later started leading my own negotiations. The experience also allowed me to interact with many Program Offices as well as the front office, which opened the door to a number of job opportunities at the end of my assignment, and continued to do so as my career progressed. I also developed very strong working relationships with my Russian counterparts that proved to be invaluable as I started to manage various programs.”

Elena Thomas, Class of 2000
Class of 2010

Fall Recruitment Activities

In 2009, the role of Recruitment Coordinator was defined within the NGFP team and fulfilled by Clarissa Berkman (PNNL). Through this new role, the NGFP’s recruitment approach was advanced in multiple ways: outreach materials were sharpened by establishing consistent messages and a recognizable visual identity; online outreach opportunities were leveraged; and NGFP marketing materials were innovated. New materials included special fliers for universities to use for advertising information sessions, contributing to a marked increase in attendance.

Targeting technical students was a key focus in 2009. Because the descriptive language and program features that attract students with a technical background are not entirely the same for policy students, material specific to the interests of technical candidates was developed and added to the program’s literature, including separate content provided to policy vs. technical university websites. This effort proved highly successful in the turnout of technical applicants.

Established Partnerships

Targeting key universities is at the core of the NGFP Recruitment Strategy’s success, placing the focus on schools from which NGFP draws a significant percentage of its candidate pool. This effort includes consistent visits, targeted information sessions, careful planning and follow-up, and networking through NGFP Fellows who are alumni of those partner schools. The NGFP continued to strengthen these partnerships in 2009, particularly with the Monterey Institute of International Studies, Georgetown University, American University, Johns Hopkins University School of Advanced International Studies, Texas A&M University, Purdue University, University of Michigan, and University of Florida. These universities view the NGFP as an excellent opportunity for their finest students—and the best opportunity for those interested in nonproliferation—and the NGFP is a routine part of their annual campus visits.

The NGFP brochure was updated to emphasize the mission and to include a section specially targeted to technical students.
Key professional associations relevant to non-proliferation provide access to important audiences at the student and professional level, helping to broaden the candidate pool and increase visibility for the NNSA and the NGFP. In 2009, the NGFP continued developing strong partnerships with the American Nuclear Society (ANS) and the Institute of Nuclear Material Management (INMM). In 2009, the NGFP’s participation was especially successful at the ANS Student Conference—the nation’s premiere recruiting event for nuclear engineering students. The event was leveraged to connect the NGFP with dozens of technical recruits and engage with universities that have strong nuclear engineering programs.

**Face-to-Face**

In 2009, NGFP participated in seven career fairs, conducted 11 information sessions and in-class presentations and conducted 11 colloquia. An emphasis on advanced advertising, such as event advertising fliers for career centers, personal emails to professors, and invitations to select students, produced excellent turnouts at most schools. In particular, there was excellent engagement at newly added technical schools, including Purdue University, Massachusetts Institute of Technology, North Carolina State University, and University of Michigan. Career fairs included the London School of Economics/Columbia University Virtual Career Fair; ANS Student Conference Career Fair; INMM Annual Conference Student Career Fair; Texas A&M University Engineering Career Fair; Denver University Global Security Career Fair; Tufts University Career Fair; and Johns Hopkins School of Advanced International Studies. Participants in recruiting efforts included the NGFP Team; PNNL policy experts and NGFP alumni Sarah Frazar and Amy Seward; and NGFP Fellows Jennifer Lacy, Jessica Raber, Marcy Fowler, and Bill Moore.

Information sessions were provided to Howard University; George Washington University Elliot School; Syracuse University; Texas A&M University; American University; Monterey Institute of International Studies; George Mason University Maxwell School; Georgetown University; Ohio State University; University of Washington; and Johns Hopkins University School of Advanced International Studies. Participants in recruiting efforts included the NGFP Team; NNSA staff Jeff Chamberlin and Karyn Durbin; NGFP alumni Aiste Ray and Maia Gemmill; and NGFP Fellows Bryan Reed, Ryan Taugher, David Peranteau, Melissa Scholz and Kirstin McNeil.
Colloquia were conducted for Texas A&M University; Purdue University; University of Florida; University of California, Berkeley; University of Wisconsin; North Carolina State University; Massachusetts Institute of Technology; Fermilab; Ohio State University; University of Michigan; and Oregon State University. Participants in technical recruiting efforts included the NGFP Team; PNNL technical experts Mike Lind, Gordon Dudder, Steve Mladineo, Amy Seward, Jon Barr, and Scott Vance; NGFP alumni Clark Cully, John Creasy, and Ethan Bodnaruk; and technical NGFP Fellows Temeka Taplin and Mark Murphey.

**Recruiting Results**

Applications to the Class of 2010 demonstrated a dramatic increase in overall candidate qualifications and experience. There were 120 applications completed by the October deadline, a 25% increase from the prior year’s 96 completed applications. The total number of technical candidates was 22 (13 PhDs and 9 Masters), representing 18% of the overall candidate pool. There were also two Juris Doctorate applicants.

**Interviews**

The highlight of the 2009 interview process was the impact of a new scheduling tool that vastly improved the exceptionally complex scheduling process. The customized scheduling application was specifically developed and implemented by Jenna Larson for the December 2009 interviews. The scheduling tool enabled the team to efficiently accommodate the specific needs of each Program Office, without double-booking interviewees or conference rooms, and keep candidate travel to a minimum. As a result, interviews were seamless, despite the increase in volume. Over a period of seven business days, 141 interviews were conducted among 19 Program Offices for 65 candidates.
The Program Offices provided very positive feedback on the smooth implementation of interviews. Furthermore, many of the offices commented on the exceptional caliber of the candidates this year, and that it was especially challenging to decide on which applicants to interview.

Several other improvements were made to the 2009 interview process. For the applicants, the deadline for applications was moved up one week, to allow sufficient selection time for Program Offices’ selections, and communication with candidates was increased. The NGFP Team made several adjustments to procedures at NNSA Headquarters that improved efficiency and support. Advance communication with the Program Offices was carefully planned, and evaluation packets were provided to each Program Office with their complete interview schedule for quick reference.

One indication that the continual improvements to the application and interview process are successful is the many emails the NGFP Team received from applicants and interview candidates offering very positive feedback about their experience. Comments included appreciation for assistance with application requirements, responsiveness, friendliness, their experience at NNSA Headquarters, and their overall impression of the program.

### Hiring and Clearances

Following the hiring selections, electronic offer letters helped expedite the hiring process. Candidate hiring for the NGFP Class of 2010 was completed by early January, and the increasing class size trend continued with a class size of 25 Fellows from 24 the year before. Furthermore, the program expanded its support to an international level, with the placement of Dan Johnson in the DOE-China Beijing office.

The rate of obtaining security clearances in time for the start of the fellowship term continued to increase in 2010, and all but two Fellows had their clearances when
they started their work. Maintaining (and even improving) the program’s track record for facilitating timely clearances was a marked accomplishment this year, due to additional DOE requirements—including intricate drug testing procedures. To prevent any potential delays, communication protocols were put in place with personnel security staff that helped closely monitor and expedite clearance processing.

The Fellows hired for the Class of 2010 raised the bar again in their academic excellence, technical background, and work experience. The collective work experience and past internships of the class comprise substantial service in significant capacities, including four government agencies, 15 nonprofit organizations, three international organizations, one foreign government, 11 technical universities/industry positions, and two military branches.

The Class of 2010 is represented by the following 18 universities.

- American Military University
- American University, School of International Service
- Columbia University, School of International and Public Affairs
- George Mason University, School of Public Policy
- George Washington University, Elliott School of International Affairs
- Georgetown University (2 Fellows)
- Georgia Institute of Technology
- Johns Hopkins University, School of Advanced International Studies (2)
- Monterey Institute of International Studies (6)
- Ohio State University
- Purdue University
- Texas A&M University, Bush School of Government and Public Service
- University of Denver, Josef Korbel School of International Studies
- University of Kentucky
- University of Michigan
- University of Pittsburgh
- University of Washington
- University of Wisconsin, Madison
Introducing the Class of 2010

Individual biographies for the Class of 2010 Fellows are provided in Appendix A. The Class of 2010 Fellows and the Program Offices that hired them are:

Katherine Bachner, NA-255: Office of National Infrastructure and Sustainability
Nassima Barrows, NA-256: Office of Second Line of Defense & Megaports Initiative
Philip Baxter, NA-211: Office of North & South American Threat Reduction
James Bernhardt, NA-211: Office of North & South American Threat Reduction
Darcy Campbell, NA-211: Office of North & South American Threat Reduction
Kristin Childress, NA-20: The Office of Defense Nuclear Nonproliferation
Emily Diez, NA-242: Cooperative Border Security Program
Joanie Dix, NA-212: Office of European & African Threat Reduction
Sean Dunlop, NA-24: Office of Nonproliferation & International Security
Michaela Eddy, NA-22: Nonproliferation Research & Development
Shannon Ewan, NA-212: Office of European & African Threat Reduction
David Graff, NA-22: Nonproliferation Research & Development
Napalonia Harper, NA-242: Cooperative Border Security Program
Daniel Johnson, Department of Energy: Beijing, China
Heather Kauffman, NA-252: Office of Weapons Material Protection
Lenka Kollar, NA-243: Office of International Regimes & Agreements, Safeguards
Natella Konstantinova, NA-242: Global Initiatives for Proliferation Prevention
David Kovatch, NA-213: Office of FSU & Asian Threat Reduction
Ross Matzkin-Bridger, NA-213: Office of FSU & Asian Threat Reduction
Danielle Miller, NA-242: International Nuclear Safeguards and Engagement Program
Taissa Sobolev, NA-241: Office of Dismantlement and Transparency
Kevin Uitvlugt, NA-242: International Nonproliferation Export Control Program
Annie Winterfield, NA-242: Front Office of Global Security Engagement and Cooperation
Erik Woloszczuk, NA-256: Office of the Second Line of Defense, Core Program
Samuel Zenobia, NA-22: Nonproliferation Research & Development
The NGFP Class of 2010. In front, left to right: David Graff, Sam Zenobia, Jim Bernhardt, Annie Winterfield, Kristen Childress, Dan Johnson, Taissa Sobolev, Sean Dunlop, Nassima Barrows, Emily Diez, Danielle Miller, Napalonia Harper, Joanie Dix, Shannon Ewan, Darcy Campbell, Erik Woloszczuk, Kevin Uitvlugt, Lenka Kollar, Kate Bachner, Jana Fankhauser (PNNL Program Manager), and Phyllis Byrd (Federal Program Manager). In back, left to right: Natella Konstantinova, Phil Baxter, Michaela Eddy, Heather Kauffman, Ross Matzkin-Bridger, and David Kovatch.
Class of 2011

For the 2010 recruitment season, the NGFP will continue to employ its three-pronged approach to recruiting: 1) targeting key universities, 2) using selective criteria, and 2) building associations.

Target Universities

For the policy track, the NGFP will continue its well-established partnerships with the nation’s top schools in these areas, including:

- Monterey Institute of International Studies
- American University
- George Washington University, Elliott School
- Georgetown University
- Johns Hopkins University, SAIS
- Texas A&M University, Bush School
- University of Denver, Korbel School
- George Mason University
- Syracuse University
- University of Washington, Jackson School.

The NGFP also has opportunities in 2010 to build new relationships with additional top-rated international relations schools, including Harvard University (William H. Tobey, former Deputy Administrator for Defense Nuclear Nonproliferation who now teaches at the Kennedy School, has requested NGFP’s recruitment presence), Columbia University, University of Michigan, and Massachusetts Institute of Technology.

In 2009, the NGFP developed and strengthened relationships with top-rated nuclear engineering schools Ohio State University and Purdue University. By the end of 2009, most of the top-ten rated nuclear engineering schools were (or were soon to be) among NGFP’s key partners:

- Texas A&M University
- University of Michigan
- University of Florida
- University of Wisconsin, Madison
- North Carolina State University
- Pennsylvania State University
- Georgia Institute of Technology
- Oregon State University.
Undergraduate Internship Programs

Leveraging connections with students in PNNL’s National Security Internship Program – and other internship programs at Sandia National Laboratory and Oak Ridge National Laboratory – is a routine part of recruitment plans. For 2010, NGFP alumnus Justin Reed (now at Lawrence Livermore National Laboratory) has invited the NGFP to give a talk to the LLNL summer interns. Historically, this particular program has produced excellent NGFP candidates. For example, David Peranteau and Bill Moore from the Class of 2009, and Sean Dunlop and Taissa Sobolev from the Class of 2010, were all LLNL interns.

Increasing Diversity

The NGFP team will work with Wayne Martin, PNNL, who leads PNNL’s initiative for minority outreach, to develop and implement more effective outreach. Outreach efforts may also include organizations such as Advancing Hispanic Excellence in Technology, Engineering, Math and Science (AHETEMS) Foundation (http://www.ahetems.org/) and the International Association of Black Professionals in International Affairs (www.iabpia.net).

Adding Spring Events

Because the NGFP application deadline is in October, it is likely that some students who learn about the NGFP in the fall simply decide not to apply because they hear about it too late. For this reason, the NGFP began to reach out to target schools in the spring of 2010, including the Monterey Institute of International Studies spring career fair and the George Washington University Elliott School spring career fair.

Recruitment Material Updates

Updates will be made to all NGFP material to ensure that the mission and work of the Fellows are current. These materials include the standard NGFP brochure and presentation, and the application FAQ flier. The Travel Banners will also be updated to include more recent imagery and information. Additional alumni highlight fliers will also be developed for select partner universities. (A prototype, developed for the Monterey Institute of International Studies, highlighted the careers of alumni who participated in the NGFP, and it was very well received.) The NGFP website content will be updated to improve clarity and navigation. Videos will be added to engage the graduate student audience, featuring NGFP Fellows and alumni talking about their experience, why they applied, and how the program supported their careers. Other website additions will include a section on “Managing Internships,” to include the Standard Operations and Procedures Manual and Annual Report, and a “Request a Visit to Your University” link to encourage new connections.
On the Horizon

The year ahead, spanning the Class of 2010 fellowship term, promises several exciting innovations and improvements. Although advances will be made in nearly every aspect of the program, the highlight will be the launch of a new NGFP online application system that will be leveraged for many other uses.

- For the incoming Class of 2010, a new customized training segment will be added to Orientation that focuses on understanding generational differences and preparing for successful work conduct in the federal environment. Also new to Orientation, a short flipcam video will feature the preceding Fellows sharing their experiences and advice.

- A new NGFP online application system, developed with more current programming methods, will provide a far more streamlined process for the Class of 2011 applicants. Improvements to the system will also improve administrative tracking and record-keeping. Most importantly, the system will provide NNSA supervisors much-needed tools for sorting through scores of candidates, to find those who meet their specific office requirements.

- Once again, excellent recruitment results are in store for the NGFP, breaking program records and far exceeding expectations.

- Adding to the NGFP career development track, a new Alumni Roundtable will connect current and past Fellows to provide meaningful career narratives, advice, and contacts.

- The new online application system will be leveraged to serve a dual purpose as a virtual “home base” for the incoming Fellows, before their term actually begins, when they have many questions. It will provide a highly efficient resource of up-to-date information and contacts.

- And finally, the program will be invigorated with the synergy among new and veteran NGFP Team members.

The next Annual Report, to encompass June 2010 through May 2011, will detail the results of these improvements—all of which contribute to the program’s singleness of purpose: to produce exceptional leaders who will build and strengthen the nation’s leadership in nonproliferation and international security in alignment with the mission of the NNSA.
Appendix A

Class of 2010 Biographies

Katherine Bachner, NA-255: Office of National Infrastructure and Sustainability

A master’s degree candidate in international policy studies at the Monterey Institute of International Studies, Katherine Bachner is pursuing certificates in both nonproliferation and Russian studies. She already holds a master’s degree in sociocultural anthropology.

For undergraduate studies, Katherine majored in anthropology with minors in history and political science. She has a strong interest in international relations and travel, having previously pursued study abroad, archaeological excavation, and exchange student endeavors in several countries: Switzerland, Mexico, Russia, Madagascar, Mongolia, and India. For the past two summers, she has received Russian language fellowships to Middlebury College’s intensive language studies program. Katherine has also served as a graduate research assistant at the James Martin Center for Nonproliferation Studies since 2008.

In spring 2010, Katherine participated in the Conference on Disarmament in Geneva, Switzerland, where she served as assistant in the Secretariat. Most recently, she interned at the Nonproliferation Treaty Review Conference.

Nassima Barrows, NA-256: Office of Second Line of Defense & Megaports Initiative

Enrolled in the master’s degree program in international affairs at American University, Nassima Barrows chose U.S. foreign policy as her graduate studies area of concentration.

Nassima has rich international experience, in part from having lived in Romania for 18 years. For four years, she was an organizer at an orphanage at the American International School of Bucharest and spent an academic year tutoring students in French language and education. Nassima then earned a bachelor’s in political science with a minor in Near Eastern languages and civilizations. During the pursuit of her undergraduate degree, she held three research assistantships in separate university departments, and later served as Middle East program research analyst.

In summer 2009, Nassima interned at the Brookings Institution, where she conducted research on U.S. Middle Eastern politics, policy, and terrorism.
Philip Baxter, NA-211: Office of North & South American Threat Reduction

In late 2009, Philip Baxter completed his Master of Public Policy degree and earned a graduate certificate in national security and public policy from George Mason University. Philip earned a bachelor’s degree with a double major in political science and history. During these studies, he interned for the U.S. Department of State’s Overseas Security Advisory Council (OSAC), where he researched and wrote papers on global security incidents and trends, elevating potential threats and the most credible intelligence to OSAC members. The next summer, he interned for the Bureau of Legislative Affairs at the Department of State, performing research into nonproliferation, arms control, and foreign policy issues and composing briefings for congressional hearings.

Since 2006, Philip has worked as an international security analyst at the International Monetary Fund, performing a variety of operational and analytical functions related to threat assessment and mitigation.

James Bernhardt, NA-211: Office of North & South American Threat Reduction

After earning a master’s degree in security management from American Military University, James Bernhardt added to his already diverse background of anti-terrorism and U.S. Department of Energy security positions. As a Reserve Officers’ Training Corps scholarship cadet, James earned a bachelor’s degree in criminal justice. He then joined the U.S. Army Reserve, where he served various levels of military police officerships in anti-terrorism and physical security, including training and/or assignments in Missouri, Washington, and Kentucky. Over the last five years, he has held varying levels of security police officer positions for Hanford Patrol. In his most recent capacity, James was responsible for implementing the safeguards and security for a special nuclear materials storage facility.

With his increasing leadership responsibilities, James has served as Company Commander for his current and previous two military commands, dating to late summer 2005.

Darcy Campbell, NA-211: Office of North & South American Threat Reduction

Pursuing a master’s in health physics at Georgetown University, Darcy Campbell feels that her field of study provides the education necessary to understand nuclear nonproliferation from scientific and environmental standpoints. To this end, her graduate degree includes a specialization in nuclear nonproliferation.
For two years during the pursuit of a bachelor’s degree in biology, Darcy worked for the Department of Epidemiology, first as a research assistant and then on promotion to project manager. A current member of Georgetown’s Health Physics Society, Darcy interned with the Environmental Health and Safety office, where she gained hands-on experience with particle and radiation detectors, supervised radiation detection, and Nuclear Regulatory Commission policy practice.

Darcy has worked at various positions before and during her academic studies, including administrative assistant for an insurance company and sales associate for a retail clothing store.

Kristin Childress, NA-20: The Office of Defense Nuclear Nonproliferation

During her graduate studies in international affairs, Kristin Childress was captivated with the idea of combining her ability to understand the scientific process and technology with her passion for global diplomacy through nuclear nonproliferation.

Kristin earned an undergraduate degree in interdisciplinary studies, during which she studied abroad two times: in Uruguay, learning intensive culture and language; and in Costa Rica at the Spanish Language Institute. In graduate school she also studied abroad in Qatar, learning Arabic culture and Gulf Region politics. Additionally, Kristin spent part of a summer managing humanitarian aid projects for an international non-profit organization in Nicaragua. Two summers later, she interned for the U.S. Department of State in Brazil, where she served as intern mentor, researched the travel motives of visa applicants, and studied the impact of the financial crisis on travel.

Since January 2009, Kristin has been a researcher at the Nuclear Security Sciences and Policy Institute, where she has analyzed the effects of group motivations on the decision pathways that lead to nuclear terrorism.

Emily Diez, NA-242: Cooperative Border Security Program

In December 2009, Emily Diez earned a master’s degree in international affairs with a concentration in security studies from the Georgia Institute of Technology.

As a teenager, Emily was introduced to international security through her participation in Dwight D. Eisenhower’s People to People Student Ambassador programs, where she was involved in an international youth summit. To deepen her understanding, she earned two bachelor’s degrees in international studies and Spanish and spent an academic year abroad, immersing herself in Spanish language, studies, and culture. Prior to graduate studies, Emily worked for two years improving and teaching a variety of education courses and coordinating with teachers in Madrid.
During 2009, Emily was both a teaching and research assistant at Georgia Tech. As the partial result of these academic endeavors, her journal article “Global Risk of Nuclear Terrorism” was published in the Journal of Strategic Security in 2010.

Joanie Dix, NA-212: Office of European & African Threat Reduction

A master’s degree candidate in nonproliferation and terrorism at the Monterey Institute of International Studies, Joanie Dix also served as a graduate research assistant at the Center for Nonproliferation Studies.

Joanie earned a bachelor’s degree in international relations with a minor in business administration. For over six years, she was manager of a local coffeehouse with full training, scheduling, and budgeting responsibilities; for three of those years, she also worked for a travel company. During one summer, Joanie worked at Terrorism Research Center/Total Intelligence Solutions, where she investigated specific organizations and prepared extensive reports covering their trends. She has also served as researcher for the Department of Defense Criminal Investigative Service.

In her most recent position, Joanie conducted research on international organizations and treaties in the nuclear nonproliferation regime to add to her graduate institution’s database.

Sean Dunlop, NA-24: Office of Nonproliferation & International Security

Sean Dunlop earned a master’s degree in international policy with a certificate in nonproliferation studies from the Monterey Institute of International Studies (MIIS). As part of his program, he took the equivalent of nine semesters of Arabic.

After earning his bachelor’s degree in music education and substitute teaching for two Pennsylvania school districts, Sean entered the Peace Corps, serving in Belize. He started graduate school immediately upon his return, but left the United States again to intern with the Comprehensive Nuclear-Test-Ban Treaty Organization. In 2009, Sean completed a certificate course in International Safeguards and Information Analysis through MIIS and the U.S. Department of Energy’s Next Generation Safeguards Initiative, through which he received a summer internship at Lawrence Livermore National Laboratory.

Since spring 2008, Sean has been a researcher at the James Martin Center for Nonproliferation Studies, where his latest position had him managing the International Organizations and Nonproliferation Program portfolio and supervising research assistants.
Michaela Eddy, NA-22: Nonproliferation Research & Development

Michaela Eddy, a pre-doctoral candidate in nuclear engineering and radiological sciences at the University of Michigan-Ann Arbor, has also completed a master of public policy degree. Her research examines the scientific portion of nonproliferation, analyzing the amorphization process and properties of zeolite, a natural mineral that is potential host material for permanent nuclear material disposal.

In addition to a master’s degree in nuclear engineering and radiological sciences, Michaela earned a bachelor’s in chemistry with a minor in nuclear engineering. She has interned with both the Nuclear Regulatory Commission and a large Michigan-based utilities company. During summer 2008, Michaela attended a public policy and nuclear threats training program through the Institute on Global Conflict and Cooperation at the University of California-San Diego. The following month, she attended a summer nonproliferation workshop through the University of Georgia.

For summer 2009, Michaela was one of the handful of recipients selected to take an intensive nuclear nonproliferation course at Brookhaven National Laboratory.

Shannon Ewan, NA-212: Office of European & African Threat Reduction

Shannon Ewan earned a master’s degree in international relations and international economics with an area of concentration in international energy policy. During her graduate studies and as an extension of her experience, she received intensive Russian language instruction at Moscow State University.

While earning a bachelor’s degree in political science and French from the University of Notre Dame, Shannon spent a year taking coursework in French at the Université Catholique de l’Ouest. After finishing her undergraduate courses, she taught English for two years at a French high school in Charleville-Mézières, France. For two academic years, she served as legislative aide for the U.S. Senate Committee on Energy and Natural Resources. The following summer, Shannon interned with two U.S. Department of State positions: the U.S. Embassy in Moscow and the Office of European Union and Regional Affairs.

In summer 2009, Shannon was selected to participate in Brookhaven National Laboratory’s comprehensive training on the nuclear nonproliferation regime and U.S. nonproliferation programs and policies. Mostly recently, she served as the Nonproliferation Intern at the U.S. Civilian Research and Development Foundation.
David Graff, NA-22: Nonproliferation Research & Development

David Graff earned a master’s degree and recently completed the Ph.D. in physics from The Ohio State University. He feels this fellowship opportunity will provide a unique opportunity to combine personal interests with his scientific background and technical expertise.

A triple major in chemistry, physics, and mathematics, David graduated from a small Midwestern United States college. For two summers, he was granted research assistant positions, one each in chemistry and physics. Between his undergraduate and graduate degrees, he was employed for two years as research scientist in the atmospheric experiments branch of a space flight center in Maryland. David also served a two-year research assistantship at the start of his doctoral studies and held a three-plus year assistantship in the physics department.

Recently, David co-authored an article published in a professional scientific journal and has twice participated in Ohio State’s International Symposium on Molecular Spectroscopy.

Napalonia Harper, NA-242: Cooperative Border Security Program

Napalonia Harper holds a master’s degree in international security from the University of Denver, with concentration areas in homeland security and intelligence and a regional focus on Eurasia and the Middle East.

Napalonia graduated with dual bachelor’s degrees in criminal justice and Spanish. In the summers before, during, and after her undergraduate education, she worked at Kirtland Air Force Base, where she disseminated medical information for military families and increased her knowledge of computer security-related programming. In addition, Napalonia worked in the Alumni and Development Office for the University of Denver’s College of Law, where she coordinated fundraisers and scholarship programs.

In summer 2009, Napalonia worked in the Office of the Coordinator for Counterterrorism at the U.S Department of State. In this position, she assisted with the development and execution of National Level Exercise 2009, a government-mandated and -directed program to test the nation’s ability to prepare for a homeland terrorist attack.
Daniel Johnson, Department of Energy: Beijing, China

Daniel Johnson is finishing a master’s degree in International Policy and Nonproliferation Studies at the Monterey Institute of International Studies. While in school, he worked as a research assistant at the Center for Nonproliferation Studies, where he wrote country profiles on nuclear and ballistic missile programs.

Daniel received his bachelor’s degree in Scandinavian Studies at the University of Minnesota-Minneapolis. As part of the program, he studied at the University of Oslo, Norway, for one year. After graduation, he worked in the private sector for several years before returning to school.

As part of his studies at the Monterey Institute, Daniel recently interned at the World Institute for Nuclear Security in Austria, where he gained real-world nuclear security experience and prepared his master’s thesis.

Heather Kauffman, NA-252: Office of Weapons Material Protection

At Johns Hopkins University, Heather Kauffman is pursuing graduate studies in international relations with concentration areas in international economics and Russian and Eurasian studies.

Heather earned a bachelor’s degree with a double major in international studies and German. To gain additional international experience, she held several service-related positions: in Moscow, she was program intern for promoting international adoption and assisting children with international travel. She then interned at the Berlin European Information Center, where she arranged forums for ambassadors and diplomatic representatives. Following the completion of her undergraduate degree, Heather became a legislative assistant for a member of the U.S. House of Representatives.

In summer 2009, Heather returned to Moscow, where she served as policy and program intern for Big Brothers/Big Sisters of Russia. More recently, she has interned with the U.S. Department of State’s Bureau of Intelligence and Research.
Lenka Kollar, NA-243: Office of International Regimes & Agreements, Safeguards

With research interests in energy policy, nuclear waste management, and nonproliferation, Lenka Kollar is in the nuclear engineering master’s program at Purdue University, where she completed her bachelor’s degree in the same discipline.

As an undergraduate, Lenka assisted in the Radiation Surface Science and Engineering Laboratory, where her research led to a presentation at the American Nuclear Society (ANS) student conference and a colloquium at Idaho National Laboratory. After holding lead academic student council and government positions, she became outreach chair of the Purdue chapter of the ANS and collaborated to form an organization for nuclear engineering graduate students. In addition, Lenka is creating an ambassadorship program to represent Purdue on a professional level.

For the past two summers, Lenka has held nuclear-related internships, one as engineer at a nuclear plant in Michigan and the other as graduate intern at Pacific Northwest National Laboratory.

Natella Konstantinova, NA-242: Global Initiatives for Proliferation Prevention

Natella Konstantinova is a master’s degree candidate studying European, Eurasian, and Russian affairs with a focus on International Security at the Elliott School of International Affairs, the George Washington University. Natella has been shaped personally by world affairs, as her family fled Baku during the Armenia-Azerbaijan conflict and left Moscow during the failed coup against Gorbachev.

Natella earned a bachelor’s degree in international relations and political science at the Maxwell School of Citizenship & Public Affairs, Syracuse University, during which she served as intern at the U.S. Department of State in Brussels. She then entered into numerous Washington, D.C. endeavors, including Eurasian project assistant for the National Democratic Institute, research intern for the Cold War International History Project at the Woodrow Wilson Center, program assistant for the U.S. Institute of Peace and the Eurasia Foundation, intern for the U.S.-Russia Business Council, and research associate for Business Executives for National Security. Most recently, Natella was an intern at the Russia Desk at the Department of State and a research intern at the Hudson Institute Center for Political-Military Analysis.

Natella is fluent in Russian and Armenian, advanced proficient in French, and has reading-level fluency in Ukrainian.
David Kovatch, NA-213: Office of FSU & Asian Threat Reduction

A master’s degree candidate in international affairs at Columbia University, David Kovatch is studying international security policy.

From an undergraduate program that included Spanish and Portuguese language skills, David earned a bachelor’s degree in Latin American studies. Using his native-level knowledge of Swedish, he was multilingual teacher at an international preschool for two years and added a year-long position for the Red Cross Youth Association of Sweden. Later, David was selected as disarmament coordinator at the World Federation of United Nations (UN) Associations, where he administered the Nuclear Weapons Free World program to over 20 youths from seven countries and attended UN meetings on arms control and proliferation. As the result of this work, he was invited to a UN conference, where he gave a presentation on engaging youth in nuclear disarmament campaigns.

Contributing to his immediate community, David has served as member of Americorps in South Carolina, where he assisted Habitat for Humanity in the construction of several homes in Miami, and led a drug and alcohol awareness program for Boys and Girls Clubs participants.

Ross Matzkin-Bridger, NA-213: Office of FSU & Asian Threat Reduction

A recent graduate of Georgetown University, Ross Matzkin-Bridger holds a master’s degree in foreign service and international relations. His studies have ranged from nuclear technology and security to diplomacy in U.S. foreign policy to theory and policy in East Asia.

Ross earned a bachelor’s degree in Asian studies and Japanese language and literature, for which he composed a thesis on anti-Japanese sentiment in East Asia and the stability of Mongolia’s domestic and international affairs. Twice, he has studied abroad: once on a grant to Mongolia and the other on a Japanese government scholarship to Kyoto University. Between academic endeavors, Ross worked for the City of Koka, Japan as coordinator for international relations. In summer 2009, he interned at the U.S. Embassy in Tokyo, where he helped coordinate the Japanese portion of a symposium on East Asian security.

Most recently, Ross was program assistant to the Korea Chair at the Center for Strategic and International Studies, where he researches the status of technologies and political developments of Asian nuclear weapons and power.
Danielle Miller, NA-242: International Nuclear Safeguards and Engagement Program

A master’s degree candidate at the University of Kentucky, Danielle Miller is studying diplomacy and international relations with a minor in international economics.

With a bachelor’s degree in human and organizational development and a minor in environmental science, Danielle interned for General Electric in Kentucky as well as managed visitor services for the Smithsonian National Air and Space Museum. The summer before her senior year, she was granted a scholarship to study in South Africa that enabled her to take a three-semester workshop on economics, education, and social cohesion; study crime and corruption in Cape Town; and volunteer for two months in local townships teaching English and computer skills.

In summer 2009, Danielle received graduate credit for an intensive workshop at Indiana University-Bloomington in Slavic, Eastern European, and Central Asian languages. Shortly after these studies, she interned at the U.S. Mission to International Organizations in Vienna, where she arrived during the Nuclear Suppliers Group meetings.

Taissa Sobolev, NA-241: Office of Dismantlement and Transparency

A recent graduate of the Monterey Institute for International Studies, Taissa Sobolev holds an MA in international policy studies and certificate in nonproliferation.

Taissa earned a bachelor’s degree in international studies and Russian and has held several employment positions, including summer researcher at the Economic Research Institute in Khabarovsk, Russia; and staff assistant for the Organization for the Prohibition of Chemical Weapons in the Hague, the Netherlands. After interning for a U.S. Senator, Taissa served as national security analyst for a U.S. Army chemical weapons challenge inspection exercise.

This past summer, Taissa was a Next Generation Safeguards Initiative intern at Lawrence Livermore National Laboratory, where she focused her research on strengthening nuclear safeguards in nuclear weapon states.
Kevin Uitvlugt, NA-242: International Nonproliferation Export Control Program

A master of public and international affairs degree recipient from the University of Pittsburgh’s Graduate School of Public and International Affairs, Kevin Uitvlugt specialized in security and intelligence studies.

Kevin graduated with a bachelor’s degree in international relations with a specialization area in Muslim studies from Michigan State University’s James Madison College. He interned in the Regional Security Office of the U.S. Embassy in Belgium, where he prepared and updated the physical security review and presented daily classified intelligence briefings on worldwide security events to senior embassy officials. This experience prompted a research paper in which he analyzed how the State Department has addressed the changing security threats posed by international terrorists. In 2009, Kevin interned at the Hudson Institute, where he researched the threat of non-state actors using nuclear, chemical, or biological weapons and investigated the nature of nuclear proliferation threats.

In addition to management experience at a major rental car company and an assisted living facility, Kevin has served for three years as a mentor for developmentally challenged youths at three local churches.

Annie Winterfield, NA-242: Front Office of Global Security Engagement and Cooperation

At the Monterey Institute of International Studies, Annie Winterfield is in the international security and nonproliferation master’s degree program. She is especially interested in U.S. nuclear policy and proliferation and political issues in the Middle East.

After earning a bachelor’s degree with a double major in political science and history, Annie worked in Seoul, South Korea as the Industrial Bank of Korea’s global education manager. She went on to volunteer at an American micro-finance company in Buenos Aires, Argentina. Upon returning to the United States, Annie worked for a member of the U.S. Congress, who was subsequently appointed to an international security position within the Obama administration. This promotion of her superior encouraged Annie to return to school, where her graduate research assistantship at the James Martin Center for Nonproliferation Studies focuses on the Iranian nuclear program.

Annie has volunteered for another member of Congress and State Representative and has served as deputy chair of the U.S. delegation in a START Plus Simulation course.
Erik Woloszczuk, NA-256: Office of the Second Line of Defense, Core Program

A Master of Public Administration degree candidate at the University of Washington-Seattle, Erik Woloszczuk has focused his studies on management in the public sphere, taking courses in economic policy analysis and nonproliferation studies.

Erik’s bachelor’s degree in European studies included courses in international law and arms control, export compliance, and weapons of mass destruction. He received a departmental Outstanding Thesis Award for his final undergraduate paper on French nuclear security policy. Additionally, he spent a year in France as an exchange student and worked up to 30 hours a week in various computer- and food service-related positions to support his education. He has also volunteered internationally during two summers: in Honduras, assisting with rebuilding a hurricane-devastated area; and in Mexico, building living facilities and teaching English to youth.

Inspired by the Institute of Nuclear Materials Management conference, Erik formed a local student chapter of the organization at his graduate institution, where he encourages information sharing with national laboratory personnel about their work in nuclear security and safeguards.

Samuel Zenobia, NA-22: Nonproliferation Research & Development

At the University of Wisconsin-Madison, Samuel Zenobia completed a master’s degree and is earning a Ph.D. in nuclear engineering-engineering physics.

After receiving a bachelor’s degree in physics with a minor in mathematics, Samuel served as undergraduate physics tutor and laboratory assistant. Since commencing graduate school, he has attended over a dozen conferences, authored three published journal articles, co-authored six published journal articles, and was granted a two-year U.S. Department of Energy (AFCI) fellowship. For the part of his research managed by the Naval Research Laboratory, Samuel was awarded a scholarship and invited to present at the Technology of Fusion Energy Conference, where he won a Best Student Paper Award.

Samuel’s most recent achievement is his design and construction of the “Materials Irradiation Experiment” (MITE-E), a unique facility designed to improve and expand the materials program within UW-Madison's Fusion Technology Institute.
The incoming Class of 2010 Fellows paused for a photo following their tour of nuclear forensic laboratories in PNNL’s 320 Building.
Expanding the community of leaders for the nonproliferation and international security area