What is the NNSA?

Established by Congress in 2000, the National Nuclear Security Administration (NNSA) is a semi-autonomous agency within the US Department of Energy (DOE) entrusted with advancing nuclear security.

**Nuclear Nonproliferation**
Providing expertise, tools, and technically informed policy recommendations to reduce the proliferation of nuclear or other weapons of mass destruction (WMDs)

**Managing the Stockpile**
Maintaining a safe, secure, and effective nuclear deterrent, including the proper mix of life-extension and weapons dismantlement

**Oversight & Change**
Providing the proper dialogues, policies, and innovative technical solutions to modernize, improve, and develop NNSA infrastructure and operations for the next generation
What is the NNSA Graduate Fellowship Program (NGFP)?

- NGFP attracts and develops next-generation leaders to advance the nuclear security mission.
- Fellows gain professional development, networking, and future career potential through hands-on experience within NNSA.
- NGFP is directed by NNSA’s Office of Management and Budget and administered by Pacific Northwest National Laboratory.
About the Fellowships

• One-year, full-time, salary-plus-benefits positions
• 52 positions available annually located at NNSA sites nationwide
• Orientation in Richland, WA and NNSA Headquarters in Washington, D.C.
• Specialized training, networking, and career development events
• Placements expected in a range of domains including:
  – Nuclear security policy and technology
  – National security research and development
  – Nuclear safety
  – Counter-terrorism/counter-proliferation
Where can you go?
Potential Placement Opportunities

- Nuclear nonproliferation
- Arms control, verification & compliance
- Nuclear safety
- Stockpile stewardship, management, and security
- Secure transportation for nuclear materials
- Infrastructure, facilities, and operations management
- Contractor and laboratory oversight
- Acquisition and project management support

Placements across the NNSA enterprise
Career Launchpad

• Learn the “big picture” of nuclear security and nonproliferation, from uranium mining to stockpile stewardship systems and arms control
• Gain experience in conveying highly complex designs, operations, and scientific topics to NNSA and other U.S. government officials
• Assist in integrating policy and technological capabilities
• Collaborate with domain experts to address global nuclear security issues
What can you do as a Fellow?

NGFP Fellows have significant responsibilities and make powerful contributions to NNSA’s critical missions. The following are example activities from previous fellowships.

- **Helped develop technologies and methods to support IAEA inspectors in detecting illicit nuclear materials**
  - Presented technical expertise in laser sensing, portable mass spectroscopy for inspectors, and nuclear detector testing
  - Developed policy and methodologies for future tests and evaluations

- **Provided insight and design input for missile modifications for the Department of Defense**
  - Made technical recommendations to the Air Force and Navy based on results from national lab partners and design conclusions
  - Oversaw budget, project execution, and activity integration
What can you do as a Fellow?

- **Provided guidance on nuclear stockpile management**
  - Develop controls and policies to the national laboratories for weapons program implementation, including development of certification/qualification plans
  - Apply quantification of margins and uncertainties using state-of-the-art design and assessment tools

- **Reviewed contractor nuclear safety system activities to ensure compliance at NNSA sites**
  - Conduct independent assessments of plant operations
  - Serve as technical or operations liaison between contractor and Federal oversight staff at policy meetings
  - Identify opportunities to improve facility and stockpile safety and security operations
Fellow accomplishments

- Worked with national and international partners to detect, secure, and dispose of WMDs
  - Supported interagency coordination and policy analysis
  - Helped develop reports to Congress
  - Participated in the development of international arms agreements and treaties (e.g. MNEPR)
- Supported S&T collaboration and partnerships to mitigate the risk of nuclear expertise proliferation
  - Coordinated a workshop on nuclear forensic methods for 25 participants from several IAEA member states
  - Worked with international nonproliferation agencies to prepare curricula for nuclear controls workshop
Desirable Academic Specializations: STEM

- Nuclear science/engineering
- Radiation/health physics
- Radiochemistry
- Chemical sciences
- Mechanical engineering
- Physics
- Industrial or occupational hygiene
- Other engineering/science
Desirable Academic Specializations: Policy & Operations

- International relations
- Nonproliferation studies
- Political science
- Security studies
- Public administration
- Public policy
- Accounting
- Finance / Project management
- Engineering management
Opportunities

• Career Development
  – Leadership Brownbags
    • Introductions, presentations, and conversations with the Associate Administrators in each mission area and/or meetings with the Undersecretary and Secretary
  – Workshops / Roundtables
    • Career-focused seminars, panels, and trainings to help establish the next step in your career, whether it be with NNSA, DOE, DHS, State, National Laboratories, Think Tanks, or Contractors
  – Special Events
    • Cohort Development (Orientation and Closing Ceremonies)
    • Legislative Committee Meeting
    • Annual Alumni Event

• Training
  – Program Office-specific
  – Domestic (other DOE sites/labs) and International (IAEA)
  – Foreign Language Development Program
How to apply

Qualifications
• Be enrolled in a graduate program at the time of application OR
• Have completed a graduate degree program within 12 months prior to the application deadline (10/19/2014 or after) AND
• Have a final and current cumulative GPA of at least 3.20 / 4.00 in the graduate degree program
• U.S. citizen eligible for a DOE Q-level security clearance
• Available to work full time from summer 2016 to summer 2017
• Career interest in U.S. and global security
• Excellent interpersonal skills and ability to work in an integrated policy and technical environment

Desirable Skills
• Hybrid background: combined policy and technical or business and policy
• Budgeting and project management
• Previous government experience
Application Components

- Candidate Background
  - Contact information, citizenship, preferred offices, skills, international experience
- Education History and Transcripts
  - Each school needs to be listed, and an unofficial PDF transcript for your current school must be uploaded.
- Letter of Interest (Writing Sample)
  - Focus on overall theme of nuclear security and/or specific foci
  - Action > Past > Present > Future with natural transition
- Resume/CV
- Letters of Recommendation
  - At least 2, as many as 4
  - People who speak to POTENTIAL!
- PNNL Job Application
- SF-86 security clearance application (due at a later date)

Deadline is 9:00 PM Pacific on Monday, October 19, 2015
Compensation and Benefits

- Salary: $52K/year ($62K post-docs)
- Relocation Stipend (50+ miles)
- Hiring Bonus ($3K taxed)
- Unique combination of broad training and practical application and interaction within major US Government programs
- Career mentorship and networking for future positions
- Health and dental plans, paid vacation, and paid holidays
- Tuition reimbursement (criteria apply)
Key Dates for the Class of 2016

- May 15, 2015: Application system opens
- October 19, 2015: Application deadline
- November 2015 – February 2016: Candidate interviews and hiring decisions
- January 2016: Begin security clearance processing
- Summer 2016: Assignments begin

Want schedule updates, reminders? Subscribe at ngfp.pnnl.gov
Frequently Asked Questions

• What are the requirements for a security clearance?
• When will offers be made?
• Can I get more than one offer?
• Who will I be employed by?
• Where will I be working?
• Can my fellowship be extended?
• Am I guaranteed a job after my fellowship?
NGFP Contact

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