Sam Brinton

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I am ready to solve the monumental sociotechnical challenges in spent nuclear fuel and waste disposition with a highly respected nuclear waste management educational experience and technical background, a thorough understanding of the intersection of research and development science and federal policy, a well-documented and respected background in coalition building and consent-based siting mediation, and the unique experience of business leadership in one of the world's only nuclear waste disposal start-ups

Announcement Number: 21-11179017, Deputy Assistant Secretary, Spent Fuel and Waste Disposition

My Educational Experience

Massachusetts Institute of Technology Graduation: May 2014

GPA: 4.2/5.0

Cambridge, MA

- Master of Science in Nuclear Science and Engineering
- Master of Science in Technology and Policy

Kansas State University Graduation: May 2011 Manhattan, KS

- GPA: 3.7/4.0
- Bachelor of Science in Mechanical Engineering with Nuclear Engineering Option
- Bachelor of Arts in Applied Music with Vocal Music Performance Option
- Minor in Chinese Language

My Professional Experience

Deep Isolation: Washington, DC Director of Global Political Strategy April 15, 2017 – Present *35 hours per week*,(b) (6)

- Grew one of the world's first and only nuclear waste management companies from a start-up to more than \$21 million in investment and a staff of more than 20 professionals in 4 years.
- Demonstrated a clear business case for integrated waste management options in national and international partnership development leading to first-of-a-kind contracts with Estonia, the United Kingdom, and the United States with trusted corporations and national decision makers.
- Secured congressional appropriations report language directing the Department of Energy to consider innovative nuclear waste management solutions with subsequent increased funding.
- Managed a multi-million dollar research and development proposal with partners in academia, national laboratories, and large corporations in innovative and cutting-edge program.

The Trevor Project: Washington, DC Vice President of Advocacy and Government Affairs October 3, 2017 – Present 45 hours per week, (b) (6)

- Coordinated a coalition of hundreds of state and national partners to the unanimous passage of the National Suicide Hotline Designation Act which has been labeled as a "once in a generation" change to the mental health crisis intervention system with the potential to save millions of lives.
- Negotiated divisive meetings and agreements between corporations and non-profits in the implementation of a more than \$100 million federally and state funded crisis management goal.

- Expanded the Advocacy and Government Affairs department from only employee to a team of nine professionals across the county and grew its budget from \$100,000 to more than \$2 million.
- Created a campaign to end the dangerous and discredited practice of conversion therapy, resulting in a 400% increase in legislative activity to more than 40 states actively participating in the campaign with successful passage of my objective legislation in more than 20 states.

Core Solutions Consulting: Washington, DC Founder and Executive Director

March 1, 2017 – October 1, 2017 50 hours per week, (b) (6)

- Expanded a consulting firm to multiple staff with specialization in government affairs contracts on advanced nuclear legislative proposal drafting, nuclear waste disposal regulatory research, and stakeholder communication engagement.
- Founded a non-profit advocacy campaign after tens of thousands of dollars of self-directed fundraising which would be cited by the New York Times, Time Magazine, CNN for its effectiveness and its ability to incorporate lived experience in diversity and inclusion.

Bipartisan Policy Center: Washington, DC Senior Policy Analyst

August 1, 2015 – March 3, 2017 55 hours per week, (b) (6)

- Oversaw a multi-million dollar think tank research project on the subject of nuclear waste with responsibilities for coordination of high level government, scientific, industry, and environmental justice experts as well as significant policy research and congressional advising.
- Produced the seminal report "Moving Forward with Consent-Based Siting for Nuclear Waste Facilities" which has become a well-cited foundation on siting nuclear waste facilities based on stakeholder surveys, original siting success research, and stakeholder engagement.
- Managed a multi-sector workforce team of communications and research staff to produce a series of five nuclear waste management policy introductory reports known as the "Nuclear Waste Primer" with graphics on a variety of technical topics in nuclear waste policy.
- Celebrated disagreement and resolved a widely divisive coalition of high-level partners with extensive debate and disagreement leading to a consensus report with unanimous agreement.
- Facilitated unique trust cooperation in the first state government level survey on consent-based siting issues based on high-level interviews and polling.

Third Way: Washington, DC Clean Energy Fellow

August 28, 2014 – September 4, 2015 55 hours a week, (b) (6)

- Positioned Third Way for future success by identifying new opportunities including the consideration of advanced nuclear innovation with significant think tank and private industry coordination which led to a series of fully funded federal research initiatives.
- Developed an innovative product, "Introducing the Advanced Nuclear Industry", with the first map of more than fifty advanced nuclear companies across the country and which has been cited thousands of times and referenced by the Secretary of Energy in COP21 debates.

- Coordination of more than a hundred industrial interviews, produced "Advanced Nuclear 101" which would lead to my leadership of a coalition for the congressional passage of the Nuclear Energy Innovation Capabilities Act.
- Made well-informed, effective, and timely decisions on topics of relevance such as "Regulating New Types of Nuclear Reactors" which allowed the development of congressional legislation, including the Nuclear Energy Innovation and Modernization Act which would also pass unanimously through Congress.

Clean Air Task Force: Cambridge, MA, *Fellow*

June 16, 2014 – August 22, 2014 40 hours per week,(b) (6)

- Analyzed the historical and the technical options available for the management of nuclear waste for congressional education along with coordinating the technical efforts of two think tanks concurrently with multiple managers and timelines.
- Produced a technology readiness assessment of used-nuclear-fuel management options, included advanced waste-reducing reactors, storage and disposal methods, reprocessing methods, and other relevant fuel cycle elements.
- Coordinated the production of multiple graphic illustrations for the general public that enhance public understanding of nuclear waste volume, risks, and options for management.
- Created a report that explained methods of managing used nuclear fuel, and their relative advantages and disadvantages, including those related to safety, sustainability, proliferation concerns, and cost which would serve as the start for multiple think tank advocacy campaigns.

Massachusetts Institute of Technology: Cambridge, MA June 2, 2011 – June 6, 2014 Research Assistant, Center for Advanced Nuclear Energy Systems 60 hours per week, (b) (6)

- Pursued dual graduate degree research centered on creating additional policy implication study features for the Code for Advanced Fuel Cycle Analysis (CAFCA) developed at MIT. The addition of waste management options as a sub-model was tested with a goal of storage location optimization based on economic, environmental, and proliferation resistance factors.
- Integrated complex factors into my research to be able to regularly advise congressional staff on a variety of technical issues while maintaining a series of trusted non-partisan relationships.
- Defended economically controversial considerations in my graduate thesis on the up and coming field of small modular reactors despite protestations from industry on its validated findings.
- Founded and served as Executive Director for the Stand With Science campaign which was awarded \$10,000 for efforts in support of federal research and development advocacy.

Argonne National Laboratory: Lemont, IL Engineering Simulations Section

May 24, 2010 – August 20, 2010 40 hours per week,(b) (6)

 Collaborating with Argonne researchers, I developed a comprehensive database describing data available for validation of advanced simulation tools from legacy experiments considering hydraulic and thermal performance of sodium-cooled fast reactor fuel assemblies.

- Demonstrated strong organizational skills and led a small team of research staff in developing a standardized process for review and inclusion of hundreds of experimental data sets which had not previously been categorized nor digitized.
- Assessed the applicability of the legacy data to advanced simulation tools by developing a
 working familiarity with commercial CFD code and completed a simulation of a simple
 benchmark problem.

The Idaho National Laboratory: Idaho Falls, ID Systems Dynamics Research

May 25, 2009 – December 18, 2009 40 hours per week,(b) (6)

- Developed a working knowledge and ability in system analysis techniques. This would allow me to review technical problems with a standardized and consistent framework.
- Created a dynamic mass flow nuclear fuel cycle simulation tool called VISION Lite for reactor and fuel systems analysis which incorporated the complex government program VISION into a more understandable format.
- Recognized for the ability to simplify and standardize large and complex programs and continued this research to develop on a simplified simulation tool in preparation for public stakeholder engagement and testing.

My Selected Professional Honors and Awards

- Elected and Served on the Board of Directors of the American Nuclear Society (ANS)
- Honored as the National Hometown Hero by iHeart Radio for my work on LGBTQ Equality
- Honored as Grand Marshal for World Pride for my efforts in Diversity, Equity, and Inclusion
- Selection to Steering Committee of the Communications Committee of ANS
- North American Young Generation in Nuclear (NA-YGN) Excellence Award Recipient
- 1st Place in Department of Energy Innovations in Fuel Cycle Research Program Energy Policy
- Elected and Served on the Board of Directors of the International Youth Nuclear Congress
- National Organization of Gay and Lesbian Scientists and Technical Professionals Fellowship
- Best Poster for International Conference on Nuclear Engineering (ICONE) Conference
- Best Paper in Division for International Youth Nuclear Congress Conference
- Co-Chair of the American Nuclear Society 2013 National Student Conference