Introduction To Science Policy & Biomedical Careers In Science Policy Panel Discussion

The Boston University's Broadening Experience in Scientific Training (BU's BEST) program provides opportunities for doctoral and post-doctoral trainees to enable their professional development and to expose them to the host of career paths available to them with a PhD in the biomedical sciences. On February 28, 2024, BU's BEST presented the "Introduction to science policy and biomedical careers in science policy panel discussion". The participants included Ms. Jennifer Grodsky; Vice President for Federal Relations, BU; Dr. Stephen Decina; Environmental Policy Specialist, U.S. Department of State; Dr. Naomi Webber; Senior Principal, Lewis-Burke Associates, and Dr. Carrie D. Wolinetz; Principal, Lewis-Burke Associates. Dr. Barbara Schreiber; Associate Professor of Biochemistry & Cell Biology, BU Chobanian & Avedisian School of Medicine hosted the panel discussion.

The session began with Ms. Grodsky giving an insightful lesson on science policy at the federal level, explaining guidelines and current policy concerns. She described resources for those interested in exploring a career in science policy.

The panelists then described their career paths. Dr. Decina earned a bachelor's degree in business from Saint Joseph's University and was employed as a science teacher after joining a volunteer program for a year. He then studied at Rutgers University and earned a PhD in Biogeochemistry at BU. He completed a post-doc at the University of California, Berkeley and then a fellowship at the EPA, where he worked on the improvement of indoor air quality. Dr. Decina then joined the United Nations Foundation where he worked with the Clean Cooking Alliance to implement and educate the public regarding household energy standards. Finally, Dr. Decina began his career within the U.S. Department of State where he currently works in the Bureau of Oceans and International Environmental and Scientific Affairs. Dr. Naomi Webber attended the University of East Anglia in the UK for both her BS and PhD. Following completion of her BS in chemical physics, Dr. Webber was planning to take a gap year to travel; however, her final undergrad supervisor had a slot within her lab for a Physical Chemistry PhD student and offered Dr. Webber the position. Dr. Webber worked at the Engineering and Physical Sciences Research Council (EPSRC) and then with the Research Councils UK (RCUK) Office in the US, where she helped to build international research connections between the UK and the US. She was successful at establishing the RCUK office in the US before she began working at Lewis-Burke, a government relations firm that advocates for public policy issues of interest to universities, scientific societies, and other research and education organizations. Dr. Webber has been working at Lewis-Burke for the past 12 ½ years where she serves as a Senior Principal Consultant. Dr. Carrie Wolinetz emphasized that her career path has not been linear. She started her academic journey at Cornell University where she earned her BS in Animal Science intending to become a veterinarian, but she realized it was not the right career for her. Following the completion of her degree, she worked at the Duke University Lemur Center. She then earned her PhD in Animal Science at Penn State University. Towards the end of her PhD studies, Dr. Wolinetz took an interest in science policy and started volunteering with scientific societies and related activities. She began working as a Director of Scientific Affairs and Public Relations at the Federation of American Societies for Experimental Biology (FASEB) where she was exposed to a broad array of biomedical science research and science policy issues. Dr. Wolinetz spent the next 15 years in the external advocacy field and then transitioned to the NIH where she worked for 6 years, eventually serving as a Chief of Staff. From there, Dr. Wolinetz transitioned to a role within the White House as the Deputy Director for Health & Life Sciences, then to a role within the NIH as the Senior Advisor to the NIH director. Dr. Wolinetz wished to return to the private sector and accepted a Principal position at Lewis-Burke, where she currently leads the health and bioscience practice groups.

The panelists next described future goals related to career progression. Dr. Webber shared that the nature of her job provides for constant opportunities for learning. In addition, she shared that Lewis-Burke confers flexibility within the jobs and positions that its employees can perform. She plans to continue her work at Lewis-Burke for the foreseeable future. Dr. Wolinetz echoed all of Dr. Webber's sentiments regarding Lewis-Burke and shared that she could see herself shifting to a career in public service. Dr. Wolinetz explained that her previous careers in government ignited a sense of mission within her. Government compels her, and she could see herself returning to a role within the government in the future. Dr. Decina said that he is satisfied with where his scientific career has taken him so far and shared sentiments of possibly switching to a position that facilitates change at a local level as opposed to the more global work he is currently performing. Ultimately, he hopes to own a farm and live within a small community.

The panelists stated their recommendations for the skills trainees should focus on mastering if they are interested in pursuing careers in science policy. Dr. Wolinetz urged the students to get involved in science policy networks early in their academic journeys. Furthermore, she explained the importance of developing good communication skills, specifically the ability to convey complex information to various groups of individuals. Dr. Decina added the importance of written communication skills. Dr. Webber shared the importance of patience within the science policy field. She explained that policies can take

years to be implemented; therefore, having passion and care about the work that you are doing is important. Dr. Webber went on to illustrate the importance of crafting a resume that reflects experience in skills that are relevant within science policy. Transitioning from an academic CV to a resume allows candidates to emphasize strengths that will be valuable within the field of science policy.

Following this, the panelists explained traits they would look for when hiring a candidate for a position within their organization. Dr. Webber explained that many companies use AI to scan applications prior to review by a hiring manager. Including a specific point on your resume for each skill listed on the application can help a resume pass through the initial AI screening. Additionally, Dr. Webber emphasized the importance of caring and knowing about the company that interviewees are applying to work at. Dr. Decina mentioned that within his workplace, they primarily hire internally. For the case of PhD students hoping to get into federal work, fellowships offer a way for young professionals to get their foot in the door. Dr. Wolinetz advised applicants to carefully note the keywords listed in the application description and to make sure they are incorporated into applicants' resumes. Dr. Wolinetz emphasized that companies such as Lewis-Burke Associates are not looking for an individual who has expertise in a given field but rather for an applicant who demonstrates they can learn and apply this newfound knowledge quickly.

Dr. Schreiber then asked applicants the challenging question: if the panelists had the opportunity to redo everything, would they do anything differently, and what would they change? Dr. Decina began this discussion by stating that he wished he would have gotten serious about his career sooner in life and engaged earlier with his current passions. Dr. Decina recognized that individuals have a finite amount of time to contribute to their field of study and shared that during his time, he wishes to put all of his efforts into making the world a better place. Dr. Webber stated that she would have taken her earlier career less seriously. She told listeners that it is not essential to have a long_term plan at the beginning of a PhD journey. Dr. Wolinetz echoed some of Dr. Webber's sentiments and stated that retroactively she can see how she didn't need to take her career as seriously as she did; however, she is satisfied with the journey she took and does not wish to change anything. Dr. Wolinetz shared that she rose to a position of high power soon after completing her PhD, and with this came a heavy workload and intense pressure. This resulted in spending many of her off hours thinking about work and not being present with her family. She recognized that this kind of thinking can often only be achieved retroactively.

The final discussion focused on how the panelists manage work-life balance. Dr. Webber said that she views her time at work as a sprint where she is pushing to get as much work done as possible. At 5 PM, she clocks out and fills her time with whatever she pleases. She recognizes that working 24/7 is impossible and sets the boundary of only working when clocked in. Dr. Wolinetz admitted that she struggles with the concept of work-life balance. She shared that when she is not working, she sets aside time for other activities she enjoys, such as distance running. She is a mother of two children and stated that prioritizing both her family and work can sometimes lead her to sacrifice self-care and sleep. Dr. Wolinetz shared that she holds the mindset that her children will not remember her for her career accomplishments but rather for the time they spend with her. Finally, Dr. Decina shared that different careers have different levels of intensity and expectations for work-life balance and he recommends that a person consider their own need for work-life balance and intensity and commitment required by a career when choosing a career path.

BU's BEST and all the attendees would like to thank the presenters for their insights on this interesting topic, including the options available to those interested in a career in science policy.

Summary by PhD students, Bahar Bakhshi, Jillian Grassia and Madeline Labott