

## FC708 Professional Development Skills

### Panel discussion: Introduction to science policy

March 16, 2022

Ever wonder who delegates federal research funding? How are science agencies initiated? How are science collaborations implemented across countries? Many Ph.D. students have worked with federal agencies for funding, collaborations, and safety inspections but don't often think about the career options on the other side of these interactions. Ph.D. trained scientists play a major role in science policy and to better understand these roles, Boston University's Broadening Experiences in Scientific Training (BU's BEST) hosted a lecture and career panel to explore just that – careers in science policy. The panelists included **Ms. Jennifer Grodsky**, BU Vice President for Federal Relations; **Dr. Sanae ElShourbagy Ferreira** (GMS'18), Health Specialist, National Institutes of Health (NIH); **Dr. Libby O'Hare**, Senior Principal, Lewis-Burke Associates, Washington, D.C.; and **Dr. Naomi Webber**, Senior Principal, Lewis-Burke Associates, Washington, D.C. **Dr. Barbara Schreiber** (GRS'81), Associate Professor of Biochemistry hosted the discussion.

The field of science policy is defined as the set of federal rules, regulations, methods, practices, and guidelines under which research is conducted. There are three broad categories of science policy: Science for Policy, Policy for Science, and Science in Policy. *Science for Policy* aids in improving international relationships through science. *Policy for science* facilitates global cooperation to achieve a scientific goal while *Science in Policy* uses science to inform decisions, agreements, and law. All three dimensions greatly overlap while each play their own special role. During Ms. Grodsky's science policy lecture, she discussed examples of policy such as science and security, distribution of federal funds, and new agencies for medical innovation. Should rural state universities receive more funding? How are new agencies funded and structured? These are all important decisions that Ph.D. trained scientists can be a part of.

Scientists can take on many roles and the panelists were very helpful in describing them. Dr. ElShourbagy Ferreira works at the federal agency level, specifically for the NIH at the National Center for Advancing Translational Sciences, Division of Clinical Innovation, where she leads the implementation of strategic communications and collaboration for clinical and translational science research. Dr. Webber and Dr. O'Hare work in the private sector as Senior Principals at Lewis-Burke Associates, advocating policy for universities and other scientific organizations. Previously, Dr. O'Hare worked for the National Academy of Sciences, Engineering, and Medicine and Dr. Webber worked in international affairs for energy and defense as well as UK-US relations. Ms. Grodsky's role as BU's Vice President for Federal Relations ensures continued research support from the federal government.

Science policy is a growing field with numerous opportunities to get involved during a student's Ph.D. training. The panelists suggested the American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellowship, the

Jefferson Fellowship, as well as the Catalyzing Advocacy for Science and Education (CASE) workshop sponsored by AAAS. Policy fellowships are a formative opportunity to learn, build a portfolio and network. Dr. ElShourbagy Ferreira's key piece of advice for getting into policy was to get engaged and build a portfolio to show interest in policy areas while Dr. O'Hare emphasized the importance of reflecting on personal strengths, weaknesses, passions, and interests. BU offers many opportunities such as BU's Science and Technology in Public Policy (STEPUP), the science policy student group, writing for The Brink, BU Today, or Bostonia to gain key writing experience and stay up to date on current events. Dr. Webber emphasized the importance of not only networking, but relationship management. Meeting individuals is one aspect, but effective communication and professionalism is just as important as networking. The panelists emphasized additional key skills important in the field of science policy: adaptability, confidence, and critical thinking.

Dr. Webber encouraged job applicants to be deliberate in learning about the company/agency culture and work/life balance so you can make an educated decision about whether the position will fit your expectations/needs. Dr. O'Hare encouraged trainees to build and use their networks to find suitable positions. Dr. ElShourbagy Ferreira said that relationship-building, teamwork, project management and curiosity are critical to what she does; she suggested that trainees find opportunities to gain communication and project management experience in addition to their scientific training.

The science policy career panel offered by BU's BEST provided an understanding of the field of science policy and potential career avenues. The panelists agreed that their careers left them fulfilled, challenged, and motivated by the ever-changing dynamics of their work. Students left the discussion with a sense of urgency and enthusiasm to drive scientific research forward by pursuing a path in science policy.

All of the panelists have graciously agreed to distribution of their emails so trainees can follow up with them; Dr. ElShourbagy Ferreira ([elshourbagysy@mail.nih.gov](mailto:elshourbagysy@mail.nih.gov)), Ms. Grodsky ([grodsky@bu.edu](mailto:grodsky@bu.edu)), Dr. O'Hare ([libby@lewis-burke.com](mailto:libby@lewis-burke.com)) and Dr. Webber ([naomi@lewis-burke.com](mailto:naomi@lewis-burke.com)).

Summary written by Cheyanne Frosti, Ph.D. student/writing intern