PATHS TO SCIENCE POLICY

What is Science Policy?

Science policy is concerned with the allocation of resources for the conduct of science towards the goal of best serving the public interest. Topics include the funding of science, the careers of scientists, and the translation of scientific discoveries into technological innovation to promote commercial product development, economic growth and economic development.

https://en.wikipedia.org/wiki/Science_policy

Who does Science Policy?

Some people who do science policy have advanced degrees in their fields; **some are just really good at advocating for a topic that they believe in.** What all science policy practitioners have in common is literacy in science, economics, and politics. Science policy experts serve as the bridge between researchers and the public, using their talents to find ways to translate esoteric, often highly technical scientific issues into something that can be explained as good policy.

http://www.asbmb.org/asbmbtoday/asbmbtoday_article.aspx?

Why is Science Policy Important?

From climate change to energy and water needs and the impacts from natural hazards, the challenges we face are growing more and more complex and the need for sustainable solutions more and more urgent. History tells us that scientific research and development can play an important role in solving these challenges, and in serving as a catalyst for economic growth, helping us to protect lives and property and raise environmental awareness. But if that research is conducted in a vacuum, and the results and lessons learned are not shared broadly, then the societal benefits will be significantly limited.

As scientists, we have a responsibility to make sure that policymakers understand the value of our science and have access to the best scientific knowledge available. Policy decisions that are informed by science are critically important in building a foundation for a sustainable future.

https://thebridge.agu.org/2013/06/21/why-is-it-important-for-science-and-policy-to-be-connected/

Where do people work?

The individuals and organizations whose job is to research, coordinate, influence, create, and disseminate science policy toil in a variety of settings: academia, think tanks, government agencies, the private sector, and nongovernmental organizations (NGOs). Their contributions make a difference in how we think about issues, society, and the world around us.

https://www.ed.ac.uk/files/atoms/files/science_policy_careers_.pdf

Other Resources

Interested in exploring options for fellowships or training in science policy?

- Science Policy Career Options: http://www.sciencemag.org/careers/2003/02/science-policy-career-resources **(Resource is divided by country opportunities)**
- Paths to Science Policy: http://www.sciencemag.org/careers/2003/02/paths-science-policy
- Science Advocacy - Get Involved: https://www.nature.com/nature/journal/v540/n7634/full/

Translation of Technical Skills to Policy and Government

Scientists and engineers have a diverse set of technical skills that are highly valued in the policy realm. These can be very specific to a particular field or area or the general skills that scientists and engineers gain inadvertently in the process of conducting science and research. These skills include: **attention to detail** (editing legislation or discussing funding values is extremely precise!), dedication, **persistence** (all those hours spent on your code or experiments has taught you to work long hours in intense situations), **problem solving**, the ability to **find, read, and use data**, and the ability to **explain complex ideas to non-experts**. These are skills that are highly valued and not common in government and policy.

How can I get involved right now?

Wherever you live, it is important for scientist to regularly engage with all levels of government (local, district, and national) through many channels.

- **Advocacy Events** - Most professional societies have advocacy and government engagement committees that work promote and support the field directly and often organize visits to governmental offices, petitions, provide updates on potential legislation that may effect the technical field.
- **Direct Communications with your Representatives** - Elected members of government (at any level) LOVE to hear from their constituents. Call, email, or stop by their office to talk about the issues that you most care about.
- **Participate in Science Outreach** - It is important to help the general public to better understand your specific field and science and engineering overall. Participate in science engagement events for people of all ages to share your excitement about science.

Remember, no one is more passionate and knowledgeable about your work and why it is important than you!