Science Policy for Beginners

What Is Science Policy?

Any rules or regulations concerning the allocation of resources for the conduct of science towards the goal of best serving the public interest.

- Federal notices and declarations
- Institutional regulations
- Scientific society statements
- Requests for information

Science for Policy

Using scientific information to advise on proposed policy changes.

Scientists can get involved in policy issues while continuing to pursue research by:
- Serving on federal advisory committees.
- Providing data analysis to inform lawmakers on proposed policies.
- Responding to requests for information as individual researchers.

Policy for Science

Analyzing federal agency decisions concerning scientific research and conduct.

Shifting from research to a science policy career includes:
- Proposing and advocating for changes to current policies and practices.
- Providing an avenue for investigator-to-lawmaker interactions.
- Reviewing proposed policies and changes that impact scientific research.

Why Should Trainees and Early-career Researchers Be Involved?

Federal agencies routinely discuss and propose changes to issues that directly affect students and funding opportunities.

Examples include changes in requirements for fellowship applications, national salary adjustments for postdoctoral fellows, and revisions on research misconduct proceedings.

See Getting Started in Science Policy on reverse side. >
Getting Started in Science Policy

Understanding how science is funded and administered can enable scientists to identify ways to offer their expertise.

Congress oversees the federal budget, which is divided into mandatory expenses and discretionary spending.

Discretionary spending is further divided into defense and nondefense spending.

- Congress must pass a suite of appropriations bills that set spending limits.
- Before bills are passed, legislators can advocate for agency-specific funding increases.

Science research funding is part of nondefense discretionary spending.

The Executive Branch, including federal agencies like NIH and NSF, issue rules and standards related to scientific research conduct and processes.

Federal advisory committees play a key role in this effort. More information in FASEB’s FACA factsheet

Science Policy Resources

Take advantage of science policy fellowships with member societies, often listed on their websites.

Reach out to local officials or society staff to conduct informational interviews and learn more about the paths into science policy.

The Federal Register: Updated daily with published documents from federal agencies such as proposed rules, final rules, public notices, and presidential actions.

The Washington Update: FASEB’s reviews of recent policy updates and changes.

Policy-Focused Societies

- Federation of American Societies for Experimental Biology (FASEB)
- American Association for the Advancement of Science (AAAS)
- Association for Women in Science
- American Academy of Arts and Sciences

Essential Skills

If you think science policy might be for you, you will have:

- Excellent communication, both oral and written.
- Experiences outside the lab, volunteering with outreach organizations or participating in a science policy fellowship
- Critical thinking and data analysis
- Considering applying for the Howard Garrison Advocacy Fellowship which provides researchers at all career stages instruction and experience in advocacy, science policy, and science communications. Applications open annually in June.