

Becoming a Federal Scientist

A Guide to Applying for Jobs, Internships, and Fellowships

To help the nation tackle its most pressing issues, the federal government depends on a pipeline of new and diverse professionals with scientific expertise. With federal scientists playing important roles in protecting our environment, health, safety, and security, there are multiple opportunities for early- and mid-career scientists to help address these challenges (see the box, p. 2). And jobs in the federal government usually come with excellent benefits, including competitive pay, health insurance, and retirement plans; some positions even pay off student loan debt.

Today, though, a shortage of federal scientists means that important science-based work is not getting done (Davenport, Friedman, and Flavelle 2021). For example, the Environmental Protection Agency (EPA) has announced its intention to hire 1,000 employees by May 2022 to deliver on its mission and rebuild its staff in the wake of losses during the previous administration (Lee 2021).

To help scientists navigate the process of applying for government jobs, this toolkit provides information on how to search for science-based positions in the executive branch, guidance on tailoring your resume and cover letter for federal agency jobs, and tips for interviewing with civil servants.

The toolkit is specific to the executive branch, but it can also help you when applying for positions in the legislative branch. In addition, the appendix (online at www.ucsusa.org/resources/federal-science-jobs) lists sources of information on best practices for applying for work across the government, including internships and fellowships for early- and mid-career scientists interested in gaining short-term experience.

Applying for Federal Science Positions

There are three major steps to applying for almost any job: searching for openings, building a resume and cover letter, and interviewing. However, applying for federal government jobs differs from applying for work in the private and nonprofit

sectors. Most important, you need to know how to navigate USAJobs.gov, the federal government's primary portal for submitting applications. Use this website to search for positions and to create a resume, fill out applications, and track the entire application process.

SEARCHING FOR A FEDERAL SCIENCE POSITION

The federal government posts its science-based jobs, including internships and fellowships, in multiple places. You can find them on USAJobs, social media, and agency websites, through a Google search, or through your personal and professional networks. Some scientific associations also offer science policy fellowship placements across the federal government such as the American Association for the Advancement of Science (AAAS) and the Oak Ridge Institute for Science and Education (ORISE).

On USAJobs, you can browse positions available based on agency, job title, location, and type of occupation. This website provides a lot of information, but also check out the websites of individual agencies for further information on their work and missions. If you are a college student or a recent graduate, navigate to the "students and recent graduates" sections to find opportunities tailored for you.

Tips on searching for federal science jobs:

- Create an account on USAJobs and save your job searches. Set up email notifications so you can receive information about new postings that match your search criteria.
- Pay particular attention to the qualification and eligibility requirements in a job posting. Applicants should satisfy most, if not all, of the qualifications listed in the posted job description. While in other industries you may apply for jobs you are not entirely qualified for, your skills should more precisely fit what government agencies say they are seeking in the positions they post.

{ "I can't emphasize enough the value of the 2-year AAAS Science and Diplomacy Fellowship to allow you to explore areas where you can use your science to address real world issues."

—Bill Hausdorff, PhD, former AAAS Fellow at the US Agency for International Development



- You can search for a position based on your expertise (e.g., geologist, toxicologist, biologist, physicist). Scientists of all types are needed across the government.
- Some federal positions are posted under different “hiring authorities.” These hiring authorities represent special hiring paths that help agencies hire individuals representing our diverse society or fill occupation types that are in short supply. For example, a direct hiring authority can hire experts for which an agency has found a shortage (e.g., the United States Fish and Wildlife Service may need fishery biologists, the National Aeronautics and Space Administration may need mathematicians). There are also hiring authorities for people with disabilities and for veterans (OPM.gov, n.d.). The Office of Personnel Management’s [hiring information webpage](#) lists several authorities, along with information about them.
- Subscribe to agency mailing lists for job notifications. Some positions are posted only on agency sites.
- Leverage your membership on LinkedIn and in professional societies to both connect you with federal employees and learn about positions that may fit your expertise and experience. Stay in touch with these contacts and ask them to keep you in mind for future openings.

DEVELOPING A RESUME AND COVER LETTER

Your resume and cover letter are key to success in applying for federal government jobs. Together, agencies will use them to determine if you meet the job qualifications and requirements.

Tips on developing your resume:

- Federal resumes are multiple pages long and should detail your work experience and qualifications.
- After creating a profile on USAJobs, use the website’s Resume Builder to ensure that your federal resume includes all important information. Note that most federal agencies want your resume to be in the format provided by USAJobs.
- You can create multiple resumes on USAJobs, tailoring each to a specific job opening. You can also create a searchable master resume that includes all your skills, work experiences, and education.
- Mirror the language in the requirements section of each posted job description, particularly any keywords or phrases that describe required skills.
- Demonstrate your impact on your field using statistics when appropriate (e.g., I published three peer-reviewed papers in the last two years).

Why Are Federal Scientists Important?

Scientific evidence often serves as the backbone of policies affecting our daily lives, from the air we breathe and the food we eat, to the water we drink and the medications we take; from addressing global climate change to combatting deadly pandemics. Scientists spur innovation, inform policy and decisionmaking processes, and provide vital information and services to the public at large. Their work is critical to the government’s role in developing and implementing science-based activities in service of the public good. Our government needs scientists with various types of expertise, including skills and experience in research, science communication, program management, and policy development.

The work of federal scientists affects lives around the world, and it is especially crucial in making a difference for those from underserved communities (Desikan et al. 2019). Numerous federal programs are designed to address inequities around health, environment, and prosperity outcomes—from lifting community voices in policymaking to providing food security—and many of these programs serve low-income

communities, Indigenous communities, and communities of color.

Of course, politics can sometimes make the work of federal scientists difficult and challenging, and efforts to politicize science-based decisionmaking have happened across every administration to some extent. This can make it seem like government is not a great place for scientists, potentially discouraging them from entering the federal workforce. The good news is that 28 federal agencies have scientific integrity policies, developed to deter and prevent political interference in science-based decisionmaking (Carter, Goldman, and Johnson 2018; MacKinney et al. 2020; Carter et al. 2019). Moreover, the Biden administration has signaled its intention to further strengthen scientific integrity and ensure that future federal scientists have stronger rights and work in environments where they can thrive and enjoy long, productive careers serving the public (Executive Office of the President 2021).

{ “There are two main things I liked about working for the government: the satisfaction of doing good for the environment and people, and the flexibility to move around the country and the world to jobs that I was interested in.”

—Jeffrey Towner, former Scientist with the Army Corps of Engineers and US Fish and Wildlife Service }

- Check your spelling and grammar. Then ask a friend or colleague to proofread your resume carefully. Often, a federal agency will not consider an applicant whose resume contains spelling or grammatical errors.

Tips for writing a government cover letter:

- Cover letters are sometimes optional, but submitting one can give you an edge over candidates who do not submit one. They are just as important to landing a job as the resume.
- Use the cover letter to reiterate and emphasize why your skills and experiences qualify you for the job. Tailor cover letters to each job and agency.
- Review the agency’s mission, then describe how your goals align with the agency’s. For example, if you apply for a position at the EPA, highlight your passion for and work to protect human health and the environment.
- Be specific in stating which of your skills and experiences qualify you for the position. Re-read the posted job description and use its details to tailor your cover letter.
- Keep your cover letter brief. Hiring teams often must read through hundreds of applications, so be straightforward and include only relevant information.

In addition to submitting a resume and cover letter, the agency may ask you to submit other materials. These will vary based on the position posted. Transcripts are often required; they must be submitted in electronic form. A transcript and list of credible work experiences are important for determining whether an applicant meets the specifications for a posted position.

INTERVIEWING

After submitting your application, you will be contacted by email or phone if you are selected for an interview. When contacted, immediately write down *all* the information about the interview and keep your notes where you can find them easily. Ask who will interview you and what the interview format will be. Most federal government interviews are

conducted by phone or using an online portal, and one government employee or several might interview you. Ask what information you need for traveling to or logging into the interview.

Tips on interviewing:

- Do your research. Search the web for information, including the mission of the agency, department, or office you would be working for. If you know anyone who has worked at the agency, ask them to tell you about their experience there.
- Search for information about the interviewers. What are their backgrounds and current roles? Think about how you might interact with them if you received the job.
- Conduct a mock interview. Ask for help with this from a colleague or friend who can provide you with critical, constructive feedback.
- Sell yourself and your skills as much as possible. Many federal interviewers do not ask follow-up questions, so take your time, think, and include everything the agency should factor into considering your application.
- Follow up with a thank you to the interviewer(s), either with handwritten notes or emails.

A Plethora of Government Science Positions

Scientists are greatly needed across the government, and there are multiple opportunities for early- and mid-career scientists to enter careers across all three branches. If you are a college student or recent graduate, pay particular attention to opportunities listed through the Office of Personnel Management’s [Pathways Program](#). It was created specifically to recruit, hire, develop, and retain students and recent graduates for careers in the federal government.

Jobs in government service can be personally and professionally rewarding, and they can make a big impact on the health, safety, and security of people and communities around the world. Whether it is helping people stay healthy, planning

{ “While you’re in academia, find a mentor and/or institution to support your exploration of working for the federal government, particularly if you have a policy bent.” }

—Mark Goodman, State Department scientist and former fellow

a mission to Mars, or developing a conservation strategy to save an endangered species, scientists of all varieties are essential to our nation’s well-being. There is no better time to consider applying your talent, passion, and skills to government service. Our nation needs you.

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REFERENCES

Carter, Jacob M., Emily Berman, Anita Desikan, Charise Johnson, and Gretchen Goldman. 2019. *The State of Science in the Trump Era: Damage Done, Lessons Learned, and a Path to Progress*. Cambridge, MA: Union of Concerned Scientists. <https://www.ucsusa.org/sites/default/files/attach/2019/01/ucs-trump-2yrs-report.pdf>

Carter, Jacob M., Gretchen Goldman, and Charise Johnson. 2018. *Science under Trump: Voices of Scientists across 16 Federal Agencies*. Cambridge, MA Union of Concerned Scientists. <https://www.ucsusa.org/resources/science-under-trump>

Davenport, Coral, Lisa Friedman, and Christopher Flavelle. 2021. “Biden’s Climate Plans Are Stunted After Dejected Experts Fled Trump.” *Washington Post*, August 1, 2021. <https://www.nytimes.com/2021/08/01/climate/biden-scientists-shortage-climate.html>

Desikan, Anita, Jacob Carter, Shea Kinser, and Gretchen Goldman. 2019. *Abandoned Science, Broken Promises: How the Trump Administration’s Neglect of Science Is Leaving Marginalized Communities Further Behind*. Cambridge, MA Union of Concerned Scientists. <https://www.ucsusa.org/sites/default/files/2019-10/abandoned-science-broken-promises-web-final.pdf>

Executive Office of the President. 2021. “Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking.” Memorandum, January 27. Washington, DC: The White House. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking>

Lee, Stephen. 2021. “EPA, in Midst of Hiring Spree, Faces Uphill Push for More Staff.” *Bloomberg Law*, July 14, 2021. <https://news.bloomberglaw.com/environment-and-energy/epa-in-midst-of-hiring-spree-faces-uphill-push-for-more-staff>

MacKinney, Taryn, Jacob M. Carter, Genna Reed, and Gretchen Goldman. 2020. *Strengthening Scientific Integrity at Federal Agencies: Recommendations for 2021 and Beyond*. Cambridge, MA: Union of Concerned Scientists. <https://www.ucsusa.org/sites/default/files/2020-08/si-report-roadmap-for-science.pdf>

OPM.gov. n.d. “Hiring Authorities: Policy, Data, Oversight Hiring Information.” Washington, DC: US Office of Personnel Management. Accessed August 19, 2021. <https://www.opm.gov/policy-data-oversight/hiring-information/hiring-authorities>



www.ucsusa.org/federal-science-jobs

The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet’s most pressing problems. Joining with people across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

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