

US Government Jobs for Graduate Students

By Jeffrey Mankoff, PhD student in History

Although few people enter PhD programs intending to work for the federal government, there are several avenues for holders of graduate degrees to use their skills in federal service (note however that most federal government jobs are limited to US citizens). Federal jobs for PhDs exist in a wide range of fields, from scientists in government labs to policy analysts doing research for Congress. Opportunities with the federal government exist for graduate students in virtually every field. Jobs with the federal government offer an opportunity to conduct research that will directly influence policy, and often include additional benefits rarely found in the private sector, like opportunities for early retirement, travel, and continuing promotion. This guide will explain the process of searching and applying for federal employment. It will also highlight a selection of federal jobs relevant to holders of advanced degrees in several different fields-international affairs, physical sciences/engineering, social sciences, and biological sciences. The highlighted jobs are only a small selection, chosen merely to give you an idea of what you, as a holder of a doctoral degree, might expect to do in a government job. Certainly, many more opportunities exist, and you may even be at an advantage for certain positions which do not necessarily require a doctorate (holders of doctoral degrees start at a higher pay-grade for most federal jobs than do people with only bachelor's or master's degrees).

The federal workforce is facing rapid turnover in the next decade as an ever increasing percentage of government employees reach retirement age. As a result, the number of federal vacancies is and will remain high in the coming years. Additionally, many federal agencies have expanded hiring to help them confront the new challenges facing America in the 21st century. Much of this hiring is being done through such special programs as the Presidential Management Internship (PMI).

How to find a federal job

Searching for federal jobs is relatively easy, since most federal agencies have websites with detailed information about their activities and provide information on applying for a job. Other general websites (listed below) concentrate information about jobs in several different agencies. Many federal agencies also recruit actively on campus and come to Yale career fairs. Check with Graduate Career Services to find out which agencies will attend career fairs or conduct interviews.

If you are already interested in working for a particular federal agency, the best way to begin looking for a job is to go to the agency's website and look for the career section. Generally, to apply for a federal job, you must send your application materials (resume and cover letter) directly to the agency. Be sure to follow any specific instructions on the agency website. This guide is merely designed to highlight a few federal opportunities available to PhD students in a range of fields, but is far from comprehensive. If you are interested in federal employment, check out some of the general-interest websites listed below, or go directly to specific agencies for more information.



General resources:

Office of Personnel Management (OPM):

<http://www.studentjobs.gov>

Create a profile and resume, look for federal government vacancies

<http://www.USAJOBS.opm.gov>

A listing of all federal job vacancies open to outside applicants, site includes FAQs, tools for matching openings to applicants

Partnership for Public Service: <http://www.calltoserve.org>

Presidential Management Intern Program (PMI) <http://www.pmi.opm.gov>

PMI is a two-year long program open only to finishing graduate/professional students. The goal of the program is to "groom talented people for upper-level management positions in the federal government." Applicants must apply through their university in their last year of graduate study. The application process is quite competitive, and begins with nomination for the program by Yale. Students nominated by their university then proceed to a national evaluation and assessment process. Selected candidates can apply for PMI positions at a number of executive branch agencies. Available positions depend on the agency and vary widely. All include training and rotations to other agencies or branches of the federal government.

One of the main benefits of the PMI program is that it simplifies the hiring process. Finalists are invited to a special federal government job fair and receive aid in looking for a job (drastically cutting down on the paperwork and bypassing the complicated civil service job application process). PMIs are hired at the GS-9 level of the civil service pay scale, which corresponds to a salary of \$36,000 per year (n.b., holders of doctoral degrees who take civil service positions through the standard hiring process start at the GS-11 level, at a salary of \$44,000 per year; however, they have to navigate the hiring process independently, often waiting several months between application and hire).

Getting started: The first step is getting nominated for the program by Yale. If you are interested in being nominated, contact Dean Thomas Burns to arrange an interview. E-mail is thomas.burns@yale.edu

Monster Public Service

The Monster internet job hunting service has a special section for government jobs, in collaboration with the Partnership for Public Service. Go to <http://publicservice.monster.com>.

I. Careers in International Affairs--

Students in the following departments:

**International Relations, Area Studies, Political Science, History,
Anthropology, Sociology, Economics, Management**

Graduate students with backgrounds in international affairs can work for many different federal agencies, including some not normally associated with US foreign policy. The Department of Commerce, for example, needs specialists to work in its Foreign Commercial Service, which is responsible for US trade relations. Although few jobs in international affairs actually require a PhD, this particular field attracts a larger number of non-science PhDs than any other. The analytic and research skills, not to mention



knowledge of foreign cultures, accumulated during a graduate career are often quite useful in the complex and rapidly changing world of foreign affairs. This knowledge of other cultures, moreover, is not unique to people who have earned PhDs in traditional foreign affairs disciplines such as history or political science. Any field requiring extensive research abroad, including literature, anthropology, or international economics provides useful training for a career in foreign affairs. Federal agencies traditionally involved in foreign policy include the State Department, Defense Department, CIA, Treasury, and certain Congressional Committees, although an ever increasing number of federal organizations maintain an international profile.

Spotlight On: US Department of State/Foreign Service

<http://www.careers.state.gov>

The Department of State conducts the United States' diplomatic relations with foreign countries and international organizations. The permanent staff for the State Department is comprised of career Foreign Service Officers, or FSOs, who staff United States embassies and consulates abroad, rotating assignments (which also include Washington, DC and the United Nations headquarters in New York) every few years. FSOs advocate American foreign policy, protect American citizens, and promote American business interests throughout the world. FSOs also deal with transnational issues such as human rights, migration and refugees, environmental protection, arms control, etc. Knowledge of foreign languages is helpful but not necessary (the State Department provides language training for FSOs prior to their departure overseas).

FSOs are assigned to a specific functional area, or cone, for the duration of their careers. Cones include consular, economic, administrative, and political affairs, and public diplomacy. Holders of graduate degrees would probably be most interested in the political or economic cones, since these are the most involved in policy making and analysis. Graduate students in the fine arts might also be interested in the public diplomacy cone, which is responsible for US cultural affairs abroad (e.g. organizing exhibits of works in American museum, and foreign visits by American performing artists).

FSOs also have the opportunity to continue their education, both at the State Department's own Foreign Service Institute, where FSOs take courses in language and area studies prior to their departure abroad, and at regular universities through the "senior training" program in which most FSOs enroll at least once. This program allows FSOs to study for two years at American universities to enhance their skills and to serve as a resource for scholars of US foreign relations.

Candidates for the Foreign Service must pass a series of examinations and submit to an extensive background and medical check. The initial (written) exam is usually offered once per year (April 2004 is the next test date). For more information on the Foreign Service Exam, go to:

<http://www.careers.state.gov/officer/foreignservice/steps.html>.

Candidates who pass the written exam will be invited to an all-day oral examination. Candidates who fail either the written or oral exam are permitted to start the application process again the following year. There is no limit to the number of times a person may take the exam. The entire process, from written examination to granting of security and medical clearances may take up to 18 months.

In addition to FSOs, the State Department hires a limited number of so-called Foreign Service Specialists. These are people with special skills particularly needed by the Department. Because of the specialized and often technical work that Specialists may need to perform, a large number of them possess graduate degrees. Specialists may do jobs such as public opinion research and survey design, or



security analysis of government facilities abroad.

State Department Internships:

The State Department also sponsors a large number of student internships at the Department headquarters in Washington, DC, the UN Mission in New York, and at US embassies and consulates worldwide. Internships are for a minimum of ten weeks, typically for one semester (fall, spring, or summer) and most require submitting to an extensive background check. Applications are available in the McDougal Career Center Resources Library. The majority of internships are unpaid, but Yale and outside fellowships may be available. All internships are open to continuing undergraduate and graduate students, and US citizenship is usually a prerequisite.

Other possibilities:

CIA <http://www.cia.gov>

Department of Defense <http://www.dod.gov> , <http://www.dod.gov/sites/c.html#civjobs>

US Senate <http://www.senate.gov>

US House of Representatives <http://www.house.gov>

Agency for International Development <http://www.usaid.gov>

II. Careers in physical sciences and engineering--

for students in departments such as chemistry, physics, engineering & computer science

The federal government has a long history of hiring engineers and other holders of advanced degrees in the sciences. These people work in jobs ranging from international development to systems design for NASA, mostly associated in some (perhaps tangential) way with national defense. Because of the growing role of technology (everything from communications satellites to alternative fuels) in American life, and the associated high fixed costs, the federal government is playing an increasingly visible role in applied research. Whereas during the Cold War, priority was given to defense technology such as rocketry, today the definition of national defense has expanded to include an extremely wide variety of specialties, many of which have uses in civilian life as well. For example, research into alternative fuel sources, while critical in the long run to national security, also has economic and environmental benefits that make it widely applicable. The prominence of federal scientists is not limited to the physical sciences. Indeed, because of the rapid advances in biotechnology over the past decade, as well as the threat posed by biological warfare and emerging diseases, much of the government's critical national security research is now in the biological sciences, to which most of the above observations apply as well. Because government scientists are generally engaged in primary research, almost all of them tend to hold advanced degrees (PhDs or MDs).

Incidentally, the largest employer of engineers in the federal government is the Department of Defense, followed by NASA and the Departments of Transportation and Agriculture, although scientists work in many other agencies as well. The Department of the Interior hires wildlife biologists, the Department of Health and Human Services (see below) and the Centers for Disease Control hire molecular biologists, and the Department of Labor, among others, hires cognitive psychologists.

Spotlight on: National security labs

The federal government operates a number of labs, such as Los Alamos and Sandia, dedicated to national security research. These labs support scientists doing applied research in fields such as accelerator technology, climate modeling, biotechnology, and quantum computing. In addition to scientists, government labs also employ social scientists who work on projects like preventing weapons proliferation (for example through the Cooperative Threat Reduction, or Nunn-Lugar Program), and developing policies to address the threat of weapons smuggling and terrorism. The growing threat of bioterrorism has



also resulted in growing opportunities for biologists in such labs. Of course, the federal government operates labs for purposes other than protecting national security (for example, the National Institutes for Health, see below) as well.

Los Alamos National Laboratory, Los Alamos, New Mexico

<http://www.lanl.gov/jobs>

(505) 667-8894

Los Alamos employs a large number of scientists in fields like applied physics, computer science, and biomedical engineering. Besides career scientists, Los Alamos hires graduate students for short term work through its Graduate Research Assistance Program. Students hired as research assistants work for between 90 days and one year. Los Alamos hires scientists into one of its three directorates-Nuclear Weapons, Threat Reduction, and Strategic and Supporting Research.

The Directorate of Nuclear Weapons is charged with maintaining the safety and reliability of the US nuclear weapons stockpile. To this end, scientists work to develop computer models, including the massive Strategic Computing Complex of parallel supercomputers, to assess the safety and performance of the nuclear arsenal, and to conduct direct surveillance of weapons components. The Directorate of Threat Reduction is charged with monitoring and countering the threat of nuclear proliferation. Scientists working in this division develop technologies to assess foreign states' nuclear programs and safeguards to combat nuclear smuggling and terrorism. The Directorate of Threat Reduction works closely with other federal agencies, including the Department of Defense and the Ballistic Missile Defense Organization. The third Los Alamos directorate, Strategic and Supporting Research, conducts primary research in a broad range of fields, including health, environment, energy, and advanced technology.

While this research, like all conducted at Los Alamos, is devoted to enhancing national security, much of it has wider applicability. Indeed, Los Alamos maintains a very broad definition of what constitutes national security. For example, the Directorate of Strategic and Supporting Research developed the world's first human DNA library, does cutting-edge modeling of climate change, and has been at the forefront of research into fuel cells, a technology that could dramatically reduce US energy consumption.

Other federal labs engaged in national security research include Sandia National Laboratories (www.sandia.gov) and the Lawrence Livermore National Laboratory.

Other possibilities:

Department of Transportation <http://www.dot.gov>

NASA <http://www.nasa.gov>

Environmental Protection Agency <http://www.epa.gov>

Department of Energy <http://www.doe.gov>

Engineering internships open to graduate students:

Environmental Protection Agency (EPA)

Students in the sciences can get practical experience working in an EPA lab through the National Network for Environmental Studies Fellowship Program. The program appoints 30 fellows each year. Check out the program website at <http://www.epa.gov/enviroed/students.html>.



National Institutes of Health (NIH)

The NIH sponsors a 10-week summer internship program for students in biomedical engineering. Interns work with NIH scientists in the Institutes' labs located in Bethesda, Maryland. Each summer the NIH selects between 12 and 16 interns. For more information go to <http://www.nih.gov/od/ors/dbeps/besip/index.htm>.

Department of Energy (DOE)

The Energy Department sponsors the Robert Gee Partnership Internship Program, which is open to both graduate and undergraduate students. The program places engineering students in DOE labs at many locations around the country. For more information, go to the website at <http://www.ma.mbe.doe.gov/pers/gee/index.htm>.

Department of Transportation (DOT)

Students with a background in sciences and an interest in highway technology and can apply for the Federal Highway Administration's two-year Professional Development Program. Participants in the program may be eligible to receive funding for graduate studies in engineering. For more information, see <http://www.fha.dot.gov/aaa/pdp/index.htm>.

III. Jobs for social scientists-- students in economics, psychology, statistics, sociology, political science

Besides working on engineering teams at government labs (see above), social scientists can find a number of positions directly related to the policy process. In fact, most federal legislation and regulation is written on the basis of social scientific studies that identify problems and predict the impact of policy changes in any number of fields. Economists can work for the Treasury Department modeling future economic growth, sociologists can do population studies for the Census Bureau, and political scientists can work at any number of agencies studying social phenomena. The rigorous training of a PhD program prepares social scientists to confront the ambiguity of real-life policy questions. Most policy choices are made on the basis of rigorous, long-range studies that analyze problems and theorize creatively about solutions. Although not actually making policy, government social scientists provide the bedrock analyses which inform policy choices in Congress and the executive branch. In addition, because of the central role played by appropriations in the policy process, many social scientists play a role in appropriations, studying how money should be spent and looking for ways to design make policy more efficient. Most federal agencies hire PhD social scientists, but some of the more common destinations for holders of graduate degrees include the Treasury, the Commerce Department, the General Accounting Office (GAO) and Congressional Budget Office (CBO), the Internal Revenue Service, and the Office of Management and Budget.

Spotlight on: Congressional Research Service

<http://www.loc.gov/crsinfo>

The Congressional Research Service (CRS), based at the Library of Congress in Washington, DC, is the nonpartisan research arm of the US Congress. It conducts research on policy-related matters of interest to members of Congress, seeking to provide timely and reliable analysis of issues on which Congress is considering legislation. All CRS work is objective and nonpartisan. CRS researchers come from a variety of fields, usually working in multidisciplinary teams to conduct research across several fields. Analysts interact regularly with members of Congress to do policy, legal, and procedural analyses



of policy alternatives, seeking to identify trends and potential impacts of policy choices. Their work often provides a direct framework for Congress to craft legislation. CRS analysts also study the impact and policy relevance of others' research.

There are six research divisions comprising CRS: American Law; Domestic Social Policy; Foreign Affairs, Defense and Trade; Government and Finance; Information Research; and Resources, Science and Industry. In addition to providing regular reports on issues of legislative importance, CRS analysts respond directly to queries from Congressional staffers, as well as conduct seminars to better educate policy makers on relevant topics. Positions at CRS are open to foreign nationals of some countries, within guidelines established by the federal government. See the CRS website for more information about employment of non-citizens.

The Domestic Social Policy Division emphasizes working directly with Congress to craft legislation. Its work focuses on the problems of American society and looks for ways to alleviate them through the legislative process. Members of Congress charge these analysts with studying legislative issues, assessing the impact of proposed legislation and develop creative approaches to social problems that inform the writing of Congressional bills. Additionally, the Social Policy Division produces longer reports analyzing social trends over time to keep Congress informed about areas of concern. The Division has sections that focus on children and families; education, labor, and immigration; health care; and retirement/social security.

Government and Finance analysts are responsible for keeping Members of Congress informed about trends in the economy and the need to address current financial trends. Besides the reports that they write for Congress, analysts from the Government and Finance Division conduct programs to educate Members about economic matters. These programs include orientations for new Members of Congress, training institutes for Congressional staffers and legislative seminars focusing on specific financial problems. This division's analytic reports focus on areas such as banking, insurance, macroeconomic policy, trade, and globalization, in addition to the financial impacts of more general matters such as federal-state relations.

The work of the other CRS sections is similar in its general outlines. They all focus on substantive issues of interest or potential interest to Members of Congress. They conduct research, generally with a social scientific methodology that aims to understand the challenges facing the US government. This research, which ultimately finds its way either into long reports on specific issues that CRS makes available to all Members of Congress, or into responses to inquiries from Members, is the foundation for most legislation that makes its way through Congress. Because of their affiliation with the Library of Congress, CRS analysts have access to all of the Library's resources including check-out privileges, and the Internal University, which allows Library employees to enhance their skills and learn more about the work of the federal government. CRS analysts also act as teachers, conducting seminars for legislators and staffers about legislative issues. Analysts for CRS are hired as civil servants and paid according to the usual General Service (GS) pay scale.

Other possibilities:

General Accounting Office <http://www.gao.gov>

Office of Management and Budget <http://www.whitehouse.gov/omb>

Congressional Budget Office <http://www.cbo.gov>

Department of Treasury <http://www.treasury.gov>

Internal Revenue Service <http://www.irs.gov>

Department of Housing and Urban Development <http://www.hud.gov>

Department of Education <http://www.ed.gov>

Federal Trade Commission <http://www.ftc.gov>



IV. Jobs for natural scientists-- students in MB&B, MCDB, Microbiology, Genetics

Because of the ongoing biotechnology revolution, more and more public policy has to address our changing understanding of the natural world. Consequently, the federal government needs an increasing number of trained biologists to advise it on policy making. At the same time, the federal government provides the majority of funding for biological research in the United States, much of which actually occurs in government labs. The largest employer of biologists, particularly molecular biologists, is the Department of Health and Human Services (HHS) which includes the National Institutes of Health (NIH, see below), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA), among others. Biologists working for these agencies do both pure and applied research that focuses primarily on curing disease. In many ways, HHS scientists' research is comparable to that done at research universities. Besides the various components of HHS, biologists can often find federal work with doing forensic science with the FBI and Department of Homeland Security.

Spotlight on: National Institutes of Health (NIH)

<http://www.nih.gov>

In addition to providing the bulk of funding for biological research in university labs, the NIH spends approximately 10% of its budget (that is, about \$2.25 billion per year) on research projects undertaken in its own labs, principally at the Institutes' headquarters in Bethesda Maryland. NIH scientists often collaborate with colleagues at universities, consequently, NIH research remains at the academic forefront even as it seeks to address critical issues of public health. Numerous independent research institutes in Bethesda comprise the NIH. It is in these institutes, which include the National Eye Institute, the National Cancer Institute, the National Institute of Allergy and Infectious Diseases, and the National Institute on Drug Abuse (there are 27 such institutes in all) that the NIH's basic research is conducted. Moreover, a part of the research conducted by the NIH's scientists is clinical, rather than lab-based.

Each institute makes its own decisions about research funding priorities, allocating money between researcher-initiated projects at universities, training, and "intramural" research programs conducted within the NIH's institutes. Often, more than one institute will be involved in research on any given topic (e.g. Alzheimer's disease), so job seekers may have multiple options for getting hired in their field. Some research is focused on specific diseases, although about half of the money appropriated by the NIH to its institutes goes to more general research in the hopes that it will ultimately lead to discoveries with therapeutic potential. The NIH's various institutes also play a catalytic role in promoting research innovations among outside scientists, organizing seminars to discuss promising avenues of future research and exchanging ideas about approaches to issues affecting public health. As a federal agency, the NIH plays a larger role in setting the nation's agenda for biomedical research. NIH scientists thus also interact with Congress and the public to set future priorities and to ensure public oversight of the Institutes' expenditure.

NIH scientists are hired and promoted similarly to their counterparts at research universities. Researchers join the NIH on a tenure-track basis, or are hired as tenured senior researchers. Overall, the NIH itself employs around 1,000 tenured and tenure-track scientists, almost entirely at its main campus in Bethesda.



NIH Internships for graduate students

The NIH also sponsors two internship programs aimed at graduate students in the biological sciences. The Predoctoral IRTA program provides facilities for graduate students to conduct dissertation research at NIH labs, or provides a year-off experience for those seeking to try their hand at different kinds of research. Additionally, the NIH sponsors a summer internship program in biomedical research, which allows graduate students to continue or expand their dissertation research in one of the NIH labs. There are also a number of postdoctoral fellowship programs at the NIH, more information about which can be found on the NIH website.

Other possibilities:

Centers for Disease Control and Prevention <http://www.cdc.gov>

Food and Drug Administration <http://www.fda.gov>

Federal Bureau of Investigation <http://www.fbi.gov>

