Federally Employed Women Virtual STEM Day September 22, 2021

The U.S. Geological Survey isn’t just geology
All STEM fields are represented, and we have field opportunities!

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How women are lost in the “pipeline” of careers in sciences

Inadequate compensation after three years
Lack of career advancement
Insufficient recognition
Inadequate professional development opportunity
Boredom or “performs miracles on demand for no rewards”
No flexible childcare or hours or locations

Why women would stay

Good relationship w/ manager and co-workers (women)
Compensation (men) having a mentor (women)
Clear goals that are challenging
Work flow you can manage (Time, it’s all about time!)
Desirable working hours (flexi, flexi, flexi!)
Benefits (includes internal rewards)
Short, predictable commute when needed in office or lab (25 minutes or less)

Source: Brazen Careerist, Penelope Trunk, accessed April 30th, 2012
The USGS career paths are as varied as: seismologist, engineer, geophysicist, wildlife biologist, hydrologist, chemist, hydrologist, programmer, software developer, geographer, editor, botanist, and that’s off the top of my head. There is more, much more.

ENVIRONMENTAL SCIENTISTS AND GEOSCIENTISTS (36% WOMEN) + ALL OTHER PHYSICAL SCIENTISTS (61% WOMEN)

MEN $69,000 + $76,000
WOMEN $25,000 + $76,000 (START MUCH LOWER)
What is the Department of the Interior?

The department was created on March 3, 1849

Bureaus & Offices

The U.S. Department of the Interior is a Cabinet-level agency that manages America's vast natural and cultural resources. Our department employs some 70,000 people, including expert scientists and resource-management professionals, in eleven technical bureaus:

- Bureau of Indian Affairs
- Bureau of Indian Education
- Bureau of Land Management
- Bureau of Ocean Energy Management
- Bureau of Reclamation
- Bureau of Safety and Environmental Enforcement
- Bureau of Trust Funds Administration
- National Park Service
- Office of Surface Mining Reclamation and Enforcement
- U.S. Fish and Wildlife Service
- U.S. Geological Survey

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In addition to our eleven bureaus, there are a number of offices that fall under the Office of the Secretary, the Assistant Secretary for Policy, Management and Budget, Solicitor’s Office and Office of the Inspector General:

- Department of the Interior Offices
We all want our work to have meaning, purpose, and to pay us adequately.

we all have a stake in the future of our country, no matter your political party or zip code, your ancestral heritage or income level, we all must take the formidable challenges that lie ahead seriously, and we will take them head-on, together.

together, we will work to honor our nation-to-nation relationship with tribes, address the climate and nature crises, advance environmental justice, and build a clean energy future that creates good-paying jobs and powers our nation.

the change we need will take hard work and perseverance, but I know that together there is nothing we cannot accomplish.

DEB HAALAND, SECRETARY OF THE INTERIOR
What is the USGS? The largest earth science agency in the world

- The United States Geological Survey (USGS) is a scientific agency of the United States government. The scientists of the USGS study the landscape of the United States, its natural resources, and the natural hazards that threaten it. The organization's work spans the disciplines of biology, geography, geology, and hydrology. The USGS is a fact-finding research organization with no regulatory responsibility.

- The USGS is a bureau of the United States Department of the Interior; it is that department's sole scientific agency. The USGS employs about 8,670 people and is headquartered in Reston, Virginia with major offices near Lakewood, Colorado (Denver Federal Center), and Moffat Air Field, California.

- The current motto of the USGS, in use since August 1997, is "science for a changing world". The agency's previous slogan, adopted on the occasion of its hundredth anniversary, was "Earth Science in the Public Service". It was founded in 1879.
In 1990, only 12% of RGE scientists were women; by 2017, the percentage of women had more than doubled to 29%. If these trends continue, the numbers of male and female RGE scientists will be roughly equal in less than two decades.

Age composition: From 1990 to 2017, the average age of RGE scientists was 50 years, with a range of 22 to 92 years. The average age increased until 2007, then leveled out at 51–52 years. The recent increase in age variability is due to an increase in both younger and older RGE scientists; that is, age diversity has been increasing.

Female Research Scientists were on average younger than their male counterparts; the average age of male Research Scientists was 51 years while that of female scientists was only 46 years.

The USGS is male, old and White. It should reflect America. It should also include women and gender neutral, people of color and younger demographics.
The USGS has eight main science disciplines. But no cool uniforms like NPS, some areas of FWS or some areas of law enforcement or regulation. We are not a regulatory agency. We do wear lab coats in the lab.
#2. Get a Bachelors of Science Degree and work through agencies

Career Connectiveness at the USGS and Dept of Interior

- Geology
- Geography
- Physical Science

- Biology
- Climate Change
- Life Sciences

- Hydrology
- Clean water and air
- Ecosystems Science

NPS, BLM, BOR, USGS

BIA, BIE, NPS, BLM, FWS

FWS, USGS, NPS, Surface Mining Reclamation
#3. Pursue higher educational degrees once hired, you will also be more focused on what you like

The USGS PATHWAYS program is designed to get students into careers such as Presidential Management Fellows (PMF) and Recent Graduates Program. E-mail pathways@usgs.gov
#4. Find a Mentor

- Science faculty asked to review a job application for lab manager
- Name on the resume was either John or Jennifer
- More likely to hire, collaborate with, and mentor John
- Also more likely to pay John more

**REGARDLESS OF GENDER OF THE REVIEWER**

- Over 19 similar studies with this same result across ~30 years and still have same bias as early studies.

It’s bad for Jennifer, but also the lab: since a factor other than skill was (unconsciously) at play, the best person wasn’t necessarily chosen.
#5a. There are many ladders within the government science
A career or career-conditional employee of one agency may transfer, without a break in service of a single workday, to a competitive service position in another agency without competing in a civil service examination open to the public. A transfer eligible may apply under vacancy announcements open to status candidates. An employee may transfer to a position at the same, higher, or lower grade level.

Who is eligible to transfer?
Present Federal employees who are serving in the competitive service under a career or career-conditional appointment have eligibility for transfer to a position in the competitive service. To transfer, you must meet the qualification requirements for the position.
#6. Be a volunteer in a lab or volunteer for work outside your agency

The USGS has partnerships with several citizen science programs that are appropriate for classroom projects, for individual students, or for anyone who wants a fun and rewarding activity. See the Citizen Science page on our USGS Education website.

Volunteers assist on some USGS projects. In all cases, the volunteers are carefully trained and are supervised by a federal employee while they work. To ensure quality-control, data collected by volunteers are checked by USGS supervisors.

Volunteers must abide by the same rules, regulations, policies, and laws as employees. Some USGS volunteer opportunities are advertised at Volunteer.gov. Most of those involve working from home or reporting observations that you make on your own time. The USGS also collects data through volunteer citizen science programs.
Today's USGS workforce of research, development, and senior scientists has a more balanced number of men and women than it had a few decades ago, but overall diversity continues to remain low and inequalities persist.

Most significantly, scientists of color in 2017 still made up only 7 percent of this component of the workforce.

Furthermore, despite the narrowing gender gap and despite women and men having similar promotion rates and similar likelihoods of being promoted, substantial gender differences persist.
CONCLUSIONS

✓ the hardest job you will ever have in the federal government is just getting hired permanently

✓ once you have a bachelors level degree you can get hired into an entry level science or technician position and work your way up

✓ or you can pursue more education through federal programs designed to keep expertise.

✓ find a mentor. actively seek someone you admire and ask them to help you

✓ the department of interior offers many science career ladders. use them.

✓ volunteer in a government lab or science project. email me for how to do this.

✓ give back to the women that will come after you. we need scientists like you.