

The following advice and tips were collected by Career Pathways Panelist prior to the 2017 GSA Annual Meeting. Panelists are listed below:

- Roger Cooper, Newmont Mining Corporation
- Bret Dixon, Anadarko Petroleum Corporation
- Alicia Kahn, Chevron Energy Technology Co.
- Mike Kelley, NASA Headquarters
- Johanna Kovarik, U.S. Forest Service
- Bill Laprade, Shannon & Wilson, Inc.
- Aisha Morris, UNAVCO, Inc.
- Jeffrey Rubin, Tualatin Valley Fire & Rescue

***Students are interested in the amount of time you spend in the field, lab, office and traveling. What does your work involve?***

- **Roger Cooper:**

There is no simple answer to this. If you want to be home at 5.30 every night for your professional life then be a mine geologist and live in a mining town beside the mine. They are often great communities too. All geologists are expected to do a few years mine or field time as part of professional growth. It is unlikely to be big city based so flexibility with travel and living in small towns is worth developing. Get used to moving for a few years – the company is paying so be cool about it. Get used to skying too!

As a senior geologist and Geostatistician in a global company I still sometimes do punishing travel schedules in excess of 70% of some months. Sometimes I'm home for a whole month but that is the exception. When I was a city based consultant I was still away at least 20% of the time and with little predictability. As an exploration geologist I was away for many weeks at a time but I grew (pre-family) to love that under-the-stars-with-a-campfire lifestyle – never underestimate how comfortable a tent can be! While parts of travel become a chore it's also possible to lever a lot of fun travel out of work travel. When I help operations in Africa I take the weekend in London and catch up with old friends and eat fish and chips. When I go to Australia I visit family. I winkle out the best restaurants and have become a regular at many. I take my hobbies with me – photography, cooking, swimming so I always have the gear to enjoy a free couple of hours.

- **Bret Dixon:**

Depends on assignment. Some individuals in some companies may spend a lot of time in the field, on a plane, in the lab, or at the work station. Throughout my career I have done all of them. I started my career in a more operational role where I spent a lot of time on rigs and in the oilfield as well as in the office. There have been parts of my career where I was primarily conducting field and lab based geologic research and teaching. I have spent years interpreting wells logs and seismic data sets in support of both domestic and international exploration and development drilling efforts. A large part of my career has been spent in international new ventures and business development, where I often travelled the world looking for new places for my company to explore. My current role is as an advisor focused on the mentoring and training of early career geoscientists. I am also heavily involved in recruiting, and serve in a senior technical expert and advisory role across the corporation.

- **Alicia Kahn:**

Now in the downturn, travel has been severely curtailed. Whereas I used to travel globally, even a trip to a lab is rare now. Field trip frequency is much reduced as well. I spend most of my time on the computer or microscope. I anticipate that the travel will never return to what it once was, especially because many offices worldwide have been closed or reduced in size. That being said, once the economy improves for the oil and gas industry there will likely be more flexibility in meeting locations and field work/school possibilities.

- **Mike Kelley:**

“In the field” for me these days typically means visiting NASA centers and observatories, or other government and academic facilities in other parts of the country, and even facilities and labs overseas with NASA’s international partners. There are opportunities to go on outdoor field trips sometimes as well.

In a normal year, I probably travel during at least one week per month on average. Sometimes it might be 3 months with no travel, and then 6 out of the following 8 weeks have some travel. As a Program Scientist on spacecraft missions, my job is to make sure the mission teams are meeting the science requirements of the mission, make sure they have the resources they need to carry out the required work, and to help them disseminate and promote the scientific discoveries and technological advances made by the mission teams.

- **Johanna Kovarik:**

In my position as a field geologist and hydrologist with the agency in Alaska, I worked in the field 70 percent of the time. I inventoried geologic resources, mapped geology, developed and implemented monitoring plans, wrote resource reports for environmental assessments, assisted with minerals administration for large mine projects, and mentored GeoCorps participants. One of my most fun duties was to lead groups of volunteers and scientists for a few weeks a year to map caves in the alpine and on outer islands in the Alexander Archipelago. Due to the seasonal nature of work in Alaska, often I worked long hours from April – November, and spent more time working on reports and data management in the office from December through March. This often involved travel via fixed-wing aircraft, helicopter, ferry, land craft, or even canoe and spending weeks in remote places with only a radio or satellite phone for communication. This was a GS-1350-09 position, and I was hired into it through a student hiring program which converted into a permanent position.

In my current position as a national program lead, I spend about 60 percent of my time in the office and 40 percent traveling and in the field. I assist forest and regions across the National Forest System with technical and policy issues related specifically to caves, karst, and groundwater. Additionally, I write policy for my program area, develop communication tools for geologic resources, and manage the GeoCorps program for the Forest Service. While our office is based in Washington D.C., my workgroup is based in Denver, Colorado. I have had the great opportunity through a detail to work in Washington D.C. for a few months – our office is located right next to the Washington Monument on the National Mall.

- **Aisha Morris:**

My current position is focused on supporting students who are interested in exploring and pursuing careers in the geosciences, with a particular emphasis on engaging students from backgrounds that are underrepresented in the geosciences. My primary responsibilities focus on managing internship programs and partnering with the community (including educational institutions, government agencies, professional societies, non-governmental organizations, and

others as necessary) to provide opportunities and pathways for preparing the future geoscience workforce.

Throughout the year, my daily activities vary, depending on the primary focus at that time. In the fall, I focus on professional meetings, including recruiting students, and supporting past interns who are attending and presenting their work at conferences. The fall is my heaviest travel season, as I often attend 5-6 meetings away from Colorado during this period. I also spend the fall into late winter assisting intern alumni who would like help preparing graduate school or fellowship applications. In the winter, moving into the spring, the internship selection period, I focus on working with an array of UNAVCO staff and our outside partners to review internship applications, interview applicants, and select the students to whom we will make offers. In the spring we are busy with preparing for the incoming students, including general logistics, and planning for the summer activities. Summers are dominated by internship activities, including some field trips, and visits to any of our off-site interns.

Throughout the year, I am also heavily involved in a variety of service activities. I serve on several advisory committees, a national leadership board, and an award selection committee. I also review papers and NSF proposals, serve on proposal review panels, and mentor students through a variety of mechanisms.

- **Jeff Rubin:**

In any given year, I'm likely to deal with some combination of the following, either actual events in my region or elsewhere, or planning for them, or developing training and exercises for them: earthquakes, tsunamis, volcanoes, winter storms, flooding, heat waves, wildfire, hazardous materials, terrorism, infectious disease outbreaks (local to pandemic), *mishegas*, and others as they arise. Other emergency managers deal with tropical storms and severe weather – some hazards are regional, some universal. It's critical to understand that it's not all about the hazard, but the potential impacts on people, the built environment, and society.

I work out of an office, spend a lot of time with the public and my colleagues, some time at conferences (like GSA), and periodically respond to incident scenes or an emergency operations center. Exact proportions vary considerably by year, agency, specific position, and the person in it. Some positions, especially those with smaller organizations, cover the full spectrum of Emergency Managers (EM); others focus on specific aspects like planning, hazard mitigation, training and exercise development/delivery, response, or recovery.

I work more than 40 hours/week, but I'm in a salaried management position. In many agencies, entry-level EM positions are hourly, and most agencies keep a close watch on overtime.