

Why I Want to be a Geologist

I was born and raised on the coast of New Jersey. My father is a banker in New York City. His dad was a banker. I have six uncles; five of them are bankers and the sixth is a lawyer working for a bank (He was always the rebellious one I am told). I have an older cousin who had dreams of working for NASA, so he went to college to study Aerospace Engineering. He now works as a banker. This is what many people from my suburban part of New Jersey do for a living. So when I tell my family and friends that I am working on my PhD in geology I usually get a combination of confused head nods and awkward smiles. When it came time for me to go off to college, I just couldn't get excited about Wall Street finance. I wanted to be my own man and carve my own path, not be just another Farrell working in Manhattan. I had always done well in science and mathematics and decided to explore those disciplines. To be honest, geology wasn't really even on my radar. When I started as an undergraduate I was taking a variety of ecology, math, and chemistry courses. Serendipitously, my academic adviser was also a lecturer in Geological Sciences and she encouraged me to take a few geology courses. I liked them and decided to add it as a minor, until I attended geology field camp the summer after my Sophomore year.

It was during this field camp in Newfoundland and Labrador, Canada, that I truly fell in love with geology. Specifically, the large-scale landscape evolution and geomorphology components we studied provided an “awe” factor that no other discipline had given me before. I can vividly remember my first time studying an obducted ophiolite sequence, standing on a paleo-beach miles from the current shoreline, or looking at a prograding carbonate margin thrust up hundreds of feet above modern sea level. It was at this point that I was hooked. My love of these large-scale landscape features are what drew me to numerical modeling work in graduate school. I now have the power to synthesize relatively small-scale field observations and measurements into a single set of model runs which represent tens to hundreds of kilometers in scale. The excitement I get studying macro-scale topography and landscapes is the single most important reason why I want to be a geologist.

In addition to the excitement of the discipline, I love the opportunity to travel to exotic, pristine, and relatively unpopular destinations. Anyone can fly to a business meeting in Chicago or London. We as geologists get to go to places no one else has any reason to go. I love that aspect of geology, and therefore have invested considerable time to hunt down opportunities to do field work anywhere help is needed. At only 22 years old, I have already spent three months in the basin and range in Arizona, six weeks as a teaching assistant in Newfoundland, a week in the Guadalupe Mountains, and a week at White Sands national monument, amongst other field experiences. These were all either paid for by a corporation or actually had me getting paid to be there. There are not many other disciplines which will actually pay you just to study in some of the world's most beautiful places.

Finally, I love how in geology you are often working with people studying the same problem but who have been trained differently and therefore see the world in a whole different light. Much of geology is interdisciplinary and involves geologists, geophysicists, geochemists, geodesists, and engineers, as well as scientists from other disciplines like oceanography, chemistry, and physics. I have had the opportunity to work with individuals from other disciplines during my internship in Arizona as well as in my research experiences. I love how many different ways there are to attack the same problem in geology and how often perspective makes all the difference.

Geology has already rewarded me with so much. It has given me awe-inspiring experiences, amazing travel opportunities, and the chance to work with smart people who challenge the way I have been trained to see the world. It has also kept me from being a banker. I can't wait to see where it takes me next.