

# NOAA Marine Science Career - Case Studies

## Scott Rowland - Geologist

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### How do you become a geologist?

*We asked our friend Scott Rowland, how he started studying the solid and liquid matter that forms our Earth. Scott was able to tell us all about how he first began investigating geology and how he got to be a professor in the Department of Geology and Geophysics at the University of Hawaii. Scott also shared with us the coolest thing he has ever seen!*

### What made you become a geologist?

My first interest in science came from my visits to the Bishop Museum planetarium shows with my dad when I was young. After the show my dad would take me upstairs to star gaze through the telescope. Gazing at the stars was fascinating and made me want to become an astronomer. The other reason I became interested in science was thanks to my high school physics teacher, Mr. Yokoyama, who showed me that it is possible to be a careful scientist and a cool guy at the same time. By the time I entered college my plan was to major in physics and become an astronomer. Quite by accident, I took up hiking and camping, which lead me to realize that geology seemed like a great way to combine two things that I really love; science and being outdoors.

I started college at the University of Hawaii and transferred to Oregon State University. I then returned to the University of Hawaii for my Ph.D. When I was in school, the best professors I had, demanded excellence but they made learning fun. Those teachers made me a better geologist and teacher.



After a few years, I found my way back to the University of Hawaii, this time as a researcher. Eventually, I found myself teaching courses. At the moment, I spend most of my time teaching. I have been doing some research using a computer program to calculate where, and how far, lava flows will go. The best part of this work is when I get to go out into the field and check the results.

As a geologist what is the coolest thing you have seen? So far the coolest thing I have ever seen occurred back in 1985, when I was an intern at the Hawaiian Volcano Observatory, (HVO). One morning *Pu'u O'o* erupted. Later that afternoon we went out to measure the thickness of deposited cinders, and how far the rift zone had contracted, by using lasers and reflectors. I was walking a couple miles out over the cinder deposit when I noticed some fresh cracks in a lava flow. Then while I was radioing our camp to tell them about the fresh cracks, I actually saw them widen some more! I spent the rest of the afternoon measuring how fast they were widening and watching them extend across the ground. By the next morning, lava was erupting out of the cracks!

**How can I become a geologist too?** If you find that you are interested in how the Earth works, you should take all kinds of science classes. The main focus of study for a Geologist is Earth science, but may also require a bit of knowledge in math, physics, and chemistry. If you want to become any kind of scientist you should be willing to work hard and think creatively to keep the work interesting.

