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Helge Gonnermann and the path to professorship

It is great to be a professor at Rice, but my path to get here wasn't linear. I grew up in a small farming town in Germany, thinking I was going to be a cabinetmaker, like my grandfather. However, I had a fascination with America – probably from watching too many Westerns and from listening to American music. After my civil service and a year as a woodworking apprentice, I moved to Montana, where I met a wide range of interesting people who impacted my life. After spending a couple of summers and snowy winters as a ranch hand while living in a cabin on the Flathead Reservation, I moved to Missoula, where I enrolled in a couple of science classes at the University of Montana. As a part-time student, I got by as a dishwasher and short cook before working for a retired music professor who owned a piano store and taught me how to restore old pianos.

Helge Gonnermann is a professor of geophysics in the Earth Science Department

My curiosity in science was spawned by a biology high-school teacher who was passionate about science and teaching. Not surprisingly, I thought that I was interested in the dynamics of ecosystems so my initial course interests were in biology. After a botany course I wanted to take a soil science course but lacked the prerequisites. Instead I enrolled in an introductory Geology course, thinking that there was an obvious connection between a bunch of dead rocks and soil. What I had not bargained for were plate tectonics and orogeny. As I learned that the mountains that I had been living in had a rather illustrious and ongoing history, I came to realize that Earth is the ultimate dynamic system and that Geology wasn't just the study of a bunch of rocks that turn into soil.

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Life is often affected by unpredictable events. One year there was a huge snowstorm during which I ventured outside to enjoy the eerie quietness. Walking down the street through the thick snow I encountered this guy lying on a piece of cardboard underneath a Jeep Cherokee, holding a blowtorch to his oil pan. Being the only two people out and about, together with his rather unconventional way to get his car started, prompted me to ask if he wanted some help. From below the Jeep came the grey bearded face of a man who replied, "Sure you can!"

...I ENCOUNTERED THIS GUY LYING ON A PIECE OF CARDBOARD UNDERNEATH A JEEP CHEROKEE

After quite some time we got his car started and the man, Don Winston, asked if I wanted to drive up into the mountains with him, where he had a home and a bunch of pack llamas, all named after the Carter Family of American folk music fame, that he needed to tend to. I took him up on his offer.



With the storm approaching Don had moved the llamas into a barn, but his two males needed to be kept separate. Thus A.P. Carter was in the basement of Don's house. Because Don had not consulted with his wife about this arrangement, he was rather eager to do some damage control. So off we went into the Mountains, making tracks in several feet of fresh snow, this was the first of many adventurous trips with Don. It turns out that Don was a Geology professor and as a UM Geology undergrad I would eventually be taking inspirational field trips with him, plus I would end up spending a couple of summers as his field assistant.

As a Geology major I was fascinated by tectonics, but I also grew somewhat leery of the vagaries of geologic interpretation. Through some geophysics and hydrogeology courses I found myself drawn toward the seeming comfort of numbers. This led me to the University of Arizona, where I got a Master's degree in geophysics. I subsequently worked as a hydrogeologist in San Francisco, in part because I wanted to have a beneficial societal impact in what I was doing. It was during this time that I met my wife, Elizabeth.

As a hydrogeologist I was fortunate to work on interesting projects and with great colleagues, but there was still much that I wanted to learn. I eventually applied to several PhD programs, with the goal to learn more about fluid dynamics. This is how I ended up as student with Mark Richards at UC Berkeley, studying mantle convection. During the first couple of years I worked closely with a postdoc named Mark Jellinek, who became a good friend and mentor. After Michael Manga joined the Berkeley faculty I began working with him on the fluid mechanics of volcanoes and he became my thesis advisor.

Pursuing things that I found interesting and engaging is what eventually led me to Rice. Among the things I enjoy most about Rice's Earth Science department are its collegiality, the intellectual stimulation provided by faculty, students and postdocs, and of course the freedom to pursue my research and teaching interests. That's what this environment provides, and it is a privilege to be part of it.

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Interview by Larisa LaMere



Gonnermann and students in NM. Photo by Jeffrey Piccirillo.
