## Discover Earth Sciences @ IUPUI School of Science

Date June 15, 2010

Duration 7:05

## Transcript

[J. Nelson] We have such a wide range of interests among our faculty. I think that students can always find something that they'd be most interested in.

[A. Kadakia] For a certain high school student, like me, who was interested in all kinds of sciences, such as physics, chemistry, and biology, I think that they should come to IUPUI and at least, meet people from the department because geology really does bring physics and chemistry together, which are my favorite subjects, and that is what interested me the most because two of my favorite subjects coming together in one subject, and you get to see nature and the things in nature as the way they are, and you get to think about why the way they are.

[J. Nelson] We have students and professors that study things like volcanoes. We have ones that study water. We have ones that study wetlands and how to restore those. There's just all of these different options.

Recently, we've adopted different programs for our degree, so you can get a degree in just in earth sciences, follow a more traditional path of geology. You can get a degree in environmental sciences and study more of the human impact on geology. I think that opens up even more opportunities for students and more ways to find what bests fits with their interest.

[P. Vidon] Environmental Science degrees offer you a very broad base experience about science. You're going to usually, especially for students who take courses in the BSCS program, they're going to take courses in the School of Public and Environmental Affair and geology to geography to have a broad base understanding earth science as a whole.

[K. Licht] Earth sciences is very diverse, and so we have faculty members, who look at sort of traditional hard rock volcanic materials. We also have people working on streams and rivers and restorations. You have to understand something about biology to do geology well, something about chemistry, something about physics to do geology well, so it's a great integrator of science.

[V. Hernly] Well, the geology is the understanding of the study of the earth, and you can do different types of studies, different science areas. If you're interested in chemistry, you can do geochemistry. If you're interested in biology, you can study paleontology in earth sciences. It's a nice program especially if you're someone who likes to be outdoors because many of the places where we do geology are outdoor sites. Many of the different kinds of research and leisure time activities have to do with outdoor activities.

Many of our graduates go on to do work in other education, or in government and being close to Indianapolis, as the capital of the state of Indiana, there are many jobs in government that are available. We also have a large pool of environmental firms in which students can go and be hired at after graduation.

[A. Schilling] I had no idea the things that I could do, and I think IUPUI and our department really gave me all these opportunities. The main opportunity was beginning research.

There's a program called the Undergraduate Research Opportunities Program, and through that, I got to travel. I did research at the University of Colorado. I went to the Geological Society of America Conference in Denver. Through that, I also won a competition through my research called Posters on the Hill, and I was able to go down to Washington D.C. and meet all the senators and representatives, and there were 60 people in the country chosen to do that, and I was one of them.

[J. Nelson] There's just so many different things that you can do based on your interests that I think geology is one of the majors that has, I would say, one of the best or the widest opportunities for jobs afterwards.

[P. Vidon] Well, I think we have a great program that combines both traditional course work and also field work and also for a lot of opportunities for students who do internships with vice professor and vice sub field of science.

[J. Roell] As soon as I started the major, I had the opportunity to work in a laboratory, and so that developed my research interests, and then taking more advance classes, we had research projects and that sparked my interest even more. Those were able to develop into undergraduate research projects, and I am very lucky to be able to have conducted research.

[K. Licht] I always involve undergraduates in my research, so right now, I have three undergraduates working in my lab on different aspects of Antarctic research, and that's one of the things that we really try to promote in our department is trying to get undergraduates involved in research as soon as they're interested and ready to do it.

[A. Kadakia] I work in a lab, where they have ongoing research on Antarctica, which I think is really unique, and it has exposed me to a kind of research which is different, and it's very influential about what I want to do with geology in the future.

[A. Schilling] Field work is fun. I love it. I've gotten to go so many places. We have a lot of field trips with our classes and our labs because again, our department believes it's very important to actually, physically go out there and do science and do the geology and look at the geology, and not just look at pictures or the textbook.

[A. Kadakia] It is a lot of fun. You get to go out, collect some rocks, and come back and work on them. It's not a very formal way of science in the department. Everybody's free styling. They do what they want to do, and it's fun. [J. Nelson] Our department and I would say most of the school of science too have great professors and great lectures. They want to meet with students, they want students to learn, and they want to do things with students. So you know, if you have a question, you know that your professor's door is open, and you can go and talk to them. I think that's really important, that you're not just going to class, doing the homework, going home. You know that if you have a question you can go see a professor. If you want to work with other students, you have places to go to do that. If you want more experience, you have lots of opportunities to go out and get that experience.

[S. Needy] So when I came in, I don't think many geology majors start off wanting to be geology majors, so coming in as a freshman with a declared geology major was kind of a new thing for my advisor.

He recognized that, and I told them "Hey I would like maybe one day to be a professor or to make this my career," and December my freshman year, he said "Oh, we're going out in the field. Would you like to do research?" And he gave me a project, and I'm getting a publication from that for my undergraduate research, and that's incredible, that was awesome.