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A MAY 2002 THEMIS IMAGE OF A MARTIAN LAVA FLOW.>



As a kid, Phil Christensen never imagined he'd become one of the leading Mars scientists in the world. He just thought space exploration was cool.

"I grew up in the Gemini-Apollo era," he explains. "I was very interested in space and watched all the Apollo launches and stuff. I was living in Pasadena, California, and I had the opportunity to go over to the Jet Propulsion Laboratory. They gave us a tour.

"I remember going into a building where they were building a spacecraft," Christensen says. "I looked through a glass window. There were people in white suits working on this spacecraft. The guy giving the tour said, 'This spacecraft is going to the moon.'

"It was all really neat, but it never crossed my mind that I could grow up to do that. You always hear on the news, 'NASA scientists' did this and 'NASA scientists' did that. It never once even crossed my mind, 'Gee, I could be a NASA scientist.'"

After high school, Christensen went on to college at UCLA and decided to major in geology. He also stayed interested in space exploration, reading all the news he could find about moon landings and Mars missions.

"During my junior year at UCLA, I was having a cup of coffee when a friend of mine stopped by and told me that he had to quit his job because he didn't have time for it. He told me that he was working with a guy in the geology department. His job was to cut up pictures from the Mariner 9 spacecraft that was orbiting Mars at the time.

"I said, 'Wow, that sounds kind of cool.' He said, 'Well hey, I just quit, and the guy's looking for somebody. Why don't you go talk to him?'"

Christensen did just that. He soon was working with planetary geologist Hugh Kieffer. Kieffer encouraged Christensen to go to graduate school and study planetary geology.

After earning his doctorate with Kieffer as a mentor, Christensen arrived at ASU in 1986 to work as a post-doctoral fellow. At that time, NASA was looking for scientists to design scientific instruments for an upcoming Mars mission. Most of the scientists proposing instruments had worked in the field for years, and Christensen didn't think he stood much of a chance competing against them. But he decided to try anyway.

"I figured there was no way that some kid like me would get an experiment like this. But it was a good experience to try," he says.

Christensen got more than just the experience of trying. NASA selected his Thermal Emission Spectrometer (TES). Today, it is working in orbit around Mars.

Christensen has become one of those "NASA scientists" he watched through the glass as a kid. But most days you won't find him running around in a white suit. Teva sandals and tee shirts are more his style. When he's not working you'll probably find him hanging out with his two kids.

"I've got a son in 7th grade and a daughter in 6th grade. We've been to Florida twice to see rockets launched. They think that's pretty cool, but they try not to act like it's cool," laughs Christensen.

He makes sure to tell his kids, and all the kids he meets through his work, that they can become anything they choose. Christensen was lucky to meet people who encouraged him to follow his interests, but it was hard work and a passion for science that really got him where he is today.

"I think there are plenty of junior high, high school, college, and graduate students who think, like I once did, 'I could never do that!'"

Sure they can. And so can your son or daughter. The ASU scientist says that you don't have to be a geologist, astronomer, or astronaut to work in space research. "Space research is now opening up to biologists. We are looking for life on Mars and on other planets," Christensen says. "There's the entire field of engineering. Obviously, none of this happens without engineers. But right now, I probably employ more computer programmers than anyone else."

Computer programmers write the software that allows spacecraft to communicate with scientists on Earth. Other programs are used to analyze the data sent back to Earth.

Scientists and engineers are not the only folks working in space exploration, either. "I work with an artist who went into drafting. He plays an incredibly important role in exploring space, producing blueprints and maps," says Christensen.

"There are people who do the data analysis," he adds. "Others target where we take TES images. Many of these people come from a geography background. We have 100 million spectra and we have to catalogue them on CDs. We have people with library backgrounds to do that work. We have accountants. We have lawyers. All of them are involved in exploring Mars."

PHILIP CHRISTENSEN IS THE KORRICK PROFESSOR OF GEOLOGY AT ASU.