Transcript of Sonya Dehler, Geophysicist

The coolest part of my job is… the world is my playground!

I'm a geophysicist. I work as a research scientist for the federal government. For the last few years I've actually been manager here of the Marine Resources Group.

My job is basically to study the earth, especially Canada and the offshore areas around Canada. I get to travel, see different places, study different things—in some cases things that have never been studied before or that people have been working on for decades—and help try to solve the great puzzle of how the earth formed or what it looks like.

I've had the opportunity to participate in some fascinating experiments and one of these was a cruise on an icebreaker up the Nares Straight which is between Greenland and Ellesmere Island just before you get to the Arctic Ocean. And it's a cruise with German and Canadian scientists working together, 20 different disciplines of earth science, all trying to solve a single scientific problem. They were trying to determine a location of a major plate boundary between Greenland and North America and Canada. We managed to figure out not only where it wasn't, but where we think it might be.

I wanted to be scientist since I was a little girl and I explored all sorts of different options; marine biology, being an astronaut, and eventually worked my way toward the earth sciences: geology and finally geophysics, which is really math heavy which I love. And over the years got a little closer to the space program in the 1992 selection process; but being a geophysicist has been wonderful and I've never regretted my decision.

I work with about a hundred colleagues here at the Geological Survey of Canada. We're part of the Bedford Institute of Oceanography which includes the Department of Fisheries and Oceans and a few other government departments, so together there are about seven hundred specialists working on site here and we have a wonderful opportunity to exchange ideas and work together as teams. A really exciting thing that is going on right now is our survey work. We have an icebreaker right now serving in the Arctic working with an American icebreaker and they are collecting data in a part of the Canada basin that has never been surveyed before.

I think one of the big challenges for us in the future is keeping the planet safe and healthy for humans and that includes keeping a good supply of clean water; ground water—that's certainly an issue that geoscientists can work on.

I can give one piece of advice to girls it's don't ever let anyone convince you that girls aren't good at math and science; cause we're darn good at it.

Transcribed by Techsploration and WISEatlantic, 2014. Women in Action Video Series.