

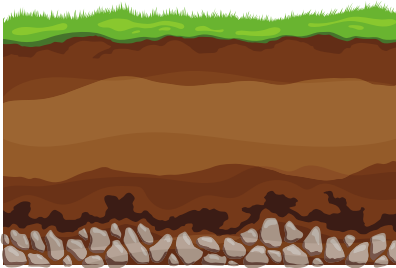
Meet a Scientist: Dr. Sherilyn Williams-Stroud

Meet Dr. Sherilyn Williams-Stroud ! She is a type of scientist called a **geologist**.

Geologists study the Earth. The Earth is 4.5 billion years old! The rocks and minerals that make up the earth are always moving and changing. They get folded, broken and deformed. Sherilyn uses special tools to “see” or image structures deep inside the earth.



How does Sherilyn use her knowledge of the Earth’s structures? She uses her knowledge to solve problems! One problem we have is that there is too much carbon dioxide gas (CO₂) in the air. This makes the Earth too warm.



Sherilyn injects CO₂ gas into rocks found deep underground.

Sherilyn works to help decrease the amount of CO₂ in the air by storing CO₂ gas underground! She figures out where we can safely inject CO₂ gas deep under the Earth’s surface. To date, Sherilyn’s team has already injected over four million tons of CO₂ into the ground!

Scientists have to be very careful when they inject and store things in the Earth. This is because injecting things into the Earth can cause earthquakes! Sherilyn must make sure that they don’t create earthquakes when they inject CO₂ into the ground.

Read an interview with Sherilyn below to learn more about her and her work.

What was your childhood like? Did you like science?

I liked science as a kid. I made a volcano model for a science fair, but didn't know at the time that meant I was interested in geology. I didn't really know anything about the field of geology until I was in college.

When I was a kid I loved hiking to the top of whatever hill might be nearby to view the scene and all the other things I could see in the distance. I think geology appealed to me because studying geology meant that I could work outdoors.

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Describe a typical day at your job.

I am usually on the computer every day. Especially in Illinois, a lot of what we know about geology is from imaging with special equipment in the **subsurface**, so we work with computer images and data. I also attend meetings with other geoscientists and we collaborate with people all over the world. Whenever I get a chance, I still go out to visit geologic exposures, about once per year.

Subsurface means below the surface.

Describe a time in your career when something did not go as planned.

I had to drop out of school to work for a year because my parents couldn't afford to keep four college-aged children in school at the same time. I worked part-time for most of the rest of college, and it took me six years to finish. I also didn't get into the graduate school of my choice the first time — but I tried again and was successful!

Is there anything else you'd like to share?

In the early part of my career, I performed traditional West African Dance with live drummers. I often ran twenty miles or more a week to stay in shape for these performances!

I also play the French horn. I've performed in community orchestras in the different cities where I've lived. Music is a very important part of my life.

Music and dance are especially enjoyable for me because my daughter danced with me in the African drum and dance troupe, and my son and I played in orchestras together.



Sherilyn in the Carey Salt Mine in Kansas in the early 2000s.

What advice do you have for students today?

When you find a mentor who you like and you think understands what you want to do, and who understands what things concern you, don't be afraid to ask for their input! You will find that most people are very willing to help!