Meet the Scientist!

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A soil microbiologist studies the diverse group of organisms in soil, their functions, and their effect on soil structure, soil properties, and plant growth.

Most Exciting Discovery
In my current position as Program Leader for Science Synthesis, I am most excited about helping to communicate the wonder of science to different audiences. My job includes ensuring that Forest Service science meets standards of excellence and reaches the people who can benefit from the knowledge.

When did you know you wanted to be a scientist? I was eight years old when I knew I wanted to become a scientist. I was a freshman in college when I decided I wanted to become a microbiologist. Bacteria intrigued me when I viewed them through the microscope, especially the differences between good and bad bacteria. Their shapes, sizes, and colors were fascinating!

Important Scientist Characteristics:
Good record-keeping contributed most to my research. Record-keeping is central in the scientific process for managing and planning research, for reproducing results, and for publishing and peer review.

Example of a simple research question I have tried to answer:
What happens to bacterial populations when simple carbon compounds are limited? I was able to show that populations of bacteria decline in soil because of a limited supply of usable simple carbon compounds. The simple carbon compounds are used by fungi which are more efficient at adjusting and storing nutrients than bacteria.

Technology or equipment used in research:
Currently, I use computers to communicate science information. When I was working as a soil microbiologist, I used traditional laboratory methods and equipment to isolate and identify bacteria from soil samples and diseased tree rings.

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