Meet the Scientist!

> Research technologists are responsible for planning, conducting, and analyzing scientific experiments as well as communicating results through peer-reviewed scientific journals. My research interests relate to living and nonliving factors that cause wood to decay.

Dr. Grant Kirker
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Important Scientist Characteristics
I think creativity is an extremely important part of my job. Time management is also critical. There are so many cool things you can do with wood that sometimes it can be hard to stay focused. Record keeping is probably the hardest part of doing science.

Example of a simple research question I have tried to answer:
What makes naturally durable wood last longer than other non-durable woods? Naturally durable wood is used as an alternative to wood treated with chemicals. Part of my research is to better understand what makes certain woods naturally durable and how we can use those characteristics to improve on current wood preservation methods. Both extractive content (chemical compounds) and wood structure can contribute to durability.

Technology or equipment used in research:
I get to use machines that can copy fungal DNA for analysis, and x-ray microscopes that can be used to create images of wood cell walls. We also have wood shops for working with wood and equipment for pressure treating wood.

Most Exciting Discovery
We've discovered that certain things taken out of some trees make excellent insecticides. I'm working with a couple of wood species that will kill termites very quickly. It turns out one of the trees is an invasive species. By finding a use for this invasive tree, we can speed up the removal of the tree from forests.

When did you know you wanted to be a scientist?
I've always been curious, and I did science projects in high school. It just seemed like a natural fit. I've been playing with rotting wood and bugs since I was a kid, and now it's my job. It's pretty awesome.