

I translate scientists'
hypotheses and word
problems into a few (essential)
equations that help further
our understanding of the
world we live in.

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## Important Scientist Characteristics

The ability to take a long word problem, discard unessential details, and reduce it to a few essential equations, are important skills in my career.

**Example of a simple research question I have tried to answer:** The question that I have had to address repeatedly is, how can I extract information from data? For example, as our climate changes it might have a very small, but nevertheless important, effect on forest health. How can we find and visualize these effects? How can we make sure that our findings and forecasts are defensible?

## Technology or equipment used in research:

With instruments available nowadays, like satellites, Global Positioning System (GPS) units, and networking, the amount of data bytes collected each day is in the quintillions. A powerful computer is essential to my research. Using the computer and statistical software, I am able to explore, visualize and analyze very large data sets.



## Most Exciting Discovery

It's exciting that by doing what I like most, I am able to make useful contributions to our understanding of the environment we live in.

An example is making informed predictions of the effects of climate change on the probability of fires.

When did you know you wanted to be a scientist? In the seventh grade I realized the usefulness of algebra. I could translate long word problems into one-line equations. I discovered statistics in college. In graduate school I realized the great opportunities statistics provided to work in many research fields, from biology, to economics, physics, medicine and all the environmental sciences.

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