**Important Scientist Characteristics**

- Curiosity,
- Good record keeping,
- Critical thinking,
- Strong mathematics,
- Logic

**Example of a simple research question I have tried to answer:** Can we find out which chemicals inside a tree respond more to stress? Using one of these marker chemicals, can we perform a simple test on parts of trees to find out if they are sick from poor diet, infections, or pollution? (This is similar to a blood test for sugar).

**Technology or equipment used in research:**
I use chromatographic techniques to separate, identify, and quantify stress-related compounds within the cells. I also use a spectrophotometer to study nutrients, chlorophyll, and protein amounts present in the cells. I grow tree tissue and cell cultures in the laboratory to study pollutants effects on the health of the cultures.

**Most Exciting Discovery**

Plants that grow under stressful conditions spend more energy to protect themselves. These plants have higher levels of stress-related compounds relative to their healthier counterparts. Thus they spend less energy into growth processes. Resistant plant varieties produce more stress-related metabolites compared to sensitive ones.

**When did you know you wanted to be a scientist?**

I went to high school in India and there we had to choose between science and arts in eighth grade. I chose science. I did an M.S. in Limnology (study of fresh water lakes and ponds) in India and another in the US. Then I did my Ph.D in breast cancer research.

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