



Mycologists explore a diverse range of problems relating to the fungal kingdom. This includes their diversity, classification, their roles in sustaining or attacking plants, insect pests and other animals or humans, and their roles in nutrient cycling.

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Important Scientist Characteristics

Curiosity helps locate interesting questions. Critical thinking helps narrow the possible research questions to those that can be answered and in finding ways to answer those questions.

Example of a simple research question I have tried to

answer: Do rainforest mushrooms speed up leaf decay? How do mushrooms benefit a mountainous rainforest area?

Technology or equipment used in research:

I use dissecting and compound microscopes to study the microscopic features of mushrooms. I use microscopes and the mushroom's appearance (recorded with digital cameras) to identify them or describe them as new species or genera. I also use thermocyclers, then DNA sequencers, followed by computer analysis to compare related species.

• Most Exciting Discovery

- I found new genera of fungi
- on the highest peak in Belize.
- The cloud forest on the peak
- has been above sea level for
- 65 million years. Some new
- species I found there were most
- closely related to species from
- the Amazon Basin and Guyana
- Shield—also very old areas.

• When did you know you

- **wanted to be a scientist?** I was
- interested in science when I
- was eight years old. I became
- committed to becoming a
- scientist as an undergraduate
- when I learned that there were
- cacti that lived in rainforest
- treetops, which are very dry
- between rains. I was intrigued
- that something that seemed so
- odd on the surface had a logical
- explanation behind it.

<http://www.rmrs.nau.edu/wildlife/invasives/>