Important Scientist Characteristics: I love forests, and I am amazed how much forests can change over time. Spending time outside sparks my curiosity to understand forests and how climate and disturbance impacts forests. As a scientist, it is important to keep long-term goals in sight, accept some failures, and collaborate with others for successful research.

Example of a simple research question I have tried to answer: How do bark beetles and fire interact? How does one influence the other? In one project, I specifically asked, “Does a low ‘dose’ of fire, one in which trees survive, increase tree defenses to better help trees fend off attacking bark beetles, similar to the way a vaccine works in humans?”

Technology or equipment used in research: I use increment borers to collect wood samples from trees. The borer extracts a 3/16” wood cylinder so I can measure wood traits without killing the tree. As trees grow, they leave a record of every year they are alive. This record enables scientists to reconstruct the conditions under which trees were growing in the past.

Most Exciting Discovery
- In the United States, we stop many fires occurring in forests.
- Stopping fires has reduced how often fires burn in many forest types. My most exciting discovery was that reducing low-severity fires can make trees vulnerable to bark beetles.

When did you know you wanted to be a scientist?
- I like science because it helps me understand the world in which we live. I studied forestry in school because forests have such huge ecological and economic impacts. I thought I would become a forest manager.
- I gradually realized I loved the whole scientific process of going from ideas to publishing to informing land management.

https://www.firelab.org/profile/hood-sharon