Hi. I'm Ursula Goodenough and I'm a biologist. I haven't always been a biologist. When I grew up in the 40s and 50s, girls weren't supposed to study science and so I managed to graduate from high school without ever taking a science course And the first science course I ever took was in college. When I was in high school, I was learning how to read and write, and that was good because when you're a scientist, you often have to write your papers, and write grants and stuff, and it's good to know how to do those things. But when I went to college, I took a biology course as a science requirement. And several weeks into the course, I was just totally hooked. The professor was telling me about things I had never heard about and I was fascinated. I had no idea. And I signed up for the major and I've been a biologist ever since, getting PhD and getting a job in the university and doing lots of research. All of my research, it turns out, has been on a single organism. Its name is chlamydomonas. It is a green single-celled, eukaryotic soil alga. And I've asked it lots of questions during my career. I've asked how it does its sexual cycle. I've figured out things about how it swims, how it makes its walls, what its genetics are like, what its genes are like, and that's been really fun. Other scientists who are biologists do it differently. They typically will study a process, like how muscles contract or how eyes work, and they will use different organisms to ask that one kind of question. But all of us are trying to figure out how organisms work and it's very, very complicated. So, we can now ask, where does biology fit in to all of the other kinds of science disciplines that are out there. And one way we could think about this is to imagine that you're going to school for the first ten billion years of the universe's existence. And for most of that time, the only course that we'd be able to take would be physics because the only thing that was going on in the universe at that time had to do with what we now call the discipline of physics. Once you've got the solar system and the Earth, then chemistry started really taking off with different kinds of elements that had been made in the stars, fitting together and making rocks, making all of the inorganic parts of the planet, and of course you could also take geology courses and figure out how the planets work. When life showed up on the planet, about three-and-a-half billion years or so ago, then a whole new set of courses would be offered on all of the organisms as they evolved, as they diversified and started interacting with each other in ecosystems, and that is the biology part. And you'd have plenty of courses to take. And then, about 500 million years ago, you could start taking courses that we could call psychology because that's when you start getting animals with brains. And they have minds and so you could study how their minds work. And as these animals got together in social systems, you could start studying their sociology and you could start thinking about how they use their minds to relate to one another. And then finally, as the hominid line came in, you could start taking anthropology courses and then eventually, humanities courses, history, and the arts, and literature, and so on. So, biology is kind of right there in the middle, preceded by the physical sciences and followed by the social sciences and humanities. So, the last thing we could consider is if you're going to be a biologist, what in the next 50 years or so are sort of the most exciting hot questions. Well, there are lots of them, but I'll lift up two. One of the things that is really exciting to me, and I try to follow it, is how brains work and particularly how human brains work. How do we do language? How do we remember what we hear? How do we learn? All of these things are, at the biological level, still very, very poorly understood and lots of exciting questions to ask. And then the other would be medicine, which is where lots of people who are biologist are engaged in trying to find out what they can do to help people who are suffering from various diseases. So some diseases come from pathogens, from viruses, and from other organisms, and so studying those processes are very important for figuring out how diseases mature. And the other would be diseases like cancer that represent misfunctions of our own bodies, and there's still huge questions on how to detect, and how to treat, and how to, hopefully, cure cancers. So, if... no matter what you do, if you decide to study biology in the future, you're going to have a great time.