CATHERINE DRENNAN: So I'm Cathy Drennan. I'm a professor of chemistry and biology here at MIT. I'm also a professor and investigator with the Howard Hughes Medical Institute, and I've been teaching freshman chemistry here at MIT, particularly a course called 511.1 since I started in 1999.

So I've always loved education, and when I started at Vassar College, I went there to study either drama or biopsychology. I mentioned I'm a chemist and a biologist. You're like, what happened there? So I went there and I didn't really know what I wanted to study. And they said, oh well, if you're thinking of anything biology, you have to take chemistry.

And I said, oh no. Please don't make me take chemistry. I took it in high school. I can tell you it has absolutely nothing to do with biology. It's deadly, dull, don't make me. Well, I had to take it, and I took it freshman year, first semester, and fell in love with chemistry. And I realized it was about teaching and how one teacher could really make such an enormous difference.

I became interested in teaching. Vassar College actually had no research at that point. So my Summers I had to do something else. I couldn't work in the research lab. And so I was a summer camp counselor, and eight through 12-year-olds. And I taught them about botany and all sorts of other things, and I was like, this is great. So I signed up to take education classes.

And my advisor in chemistry was like, what now with this thing I'm signing? You're taking this education course? What is this? But I was just absolutely in love with it.

And then when it was time for graduation, I thought about applying to grad school, but I wasn't really quite sure. And I wanted to really try out this teaching thing and see what I thought of it. So I got a job teaching high school, and I taught high school at a Quaker boarding school and working hog farm. And you have to understand, I'm from New York. And New York and New Jersey, I can be an hour away from New York City. That was OK.

And then I was going to Iowa. So I packed up and moved to Iowa to this Quaker boarding school, and I taught chemistry, biology, and physics and drama. So that came in handy. I did end up taking some drama. And I absolutely loved it. But as a high school teacher, I really wanted to enrich the curriculum. And I was looking for things to say, oh, you need to learn this in chemistry because the big question that scientists are trying to answer right now is this thing. And you need to know this to do that.
But I didn't really know what this thing was. So I felt like-- and I tried to get other material to learn more about the world of research. But there just wasn't very much good material out there, especially for chemistry. And so I went to grad school at University of Michigan, and I thought, OK, I'll learn about the world of research and I'll go back and teach high school.

And so I just tell people that I got slightly distracted on my pathway to do that. But I ended up at MIT and teaching here is such a wonderful experience. I mean, the students are absolutely incredible. And I've found a home. I can run a research group, but I also can just have a fantastic time teaching. And so that's my unusual path, I guess, to teaching this course at MIT.