Lucy Glueck
Richmond Middle School

Never Give Up

When Deborah Glueck, Ph.D., goes off to her job as an Associate Professor of Biostatistics and Radiology at the University of Colorado, she expects some hard math problems. Her students know that she can teach them all about biostatistics, and she's mentored many graduate students as they do their first research in the field.

When she isn't helping other people with their work, she's doing some of her own, researching statistical analysis of breast cancer screening data, helping make sure that studies collect the right information in the most accurate way possible.

As she helps to make sure that other women stay healthy, she comes across big numbers, confusing data sets, and difficult equations. But she doesn't mind the work. She craves the moment of a breakthrough, the solving of a truly difficult math problem, and she loves to help others solve equations of their own. When it comes to numbers, she's right at home.

But it wasn't always this way. When she was a girl growing up in Cincinnati, Ohio, she didn't like math at all. Numbers didn't click for her until high school, when she was able to move beyond the basic mechanics of math into abstractions. It was harder, sure, but that was exactly what she needed. With good teachers and hard work, she had the tools to go far.

However, people weren't going to make it easy for her. A boy in her class used to tease her, telling her that girls couldn't do math. The teacher, a former nun, stood up for her abilities, assuring the boy that girls could indeed do math, and surely she herself served as proof. But in her generation, most girls, regardless of ability, didn't do math.

When she went to Harvard University, she was one of only three female math majors in the entire class. And there were no ex-nuns there. The professors, too, were all male. In this situation, it would be easy for her to feel like a fish out of water. But she rose to the challenge, completing her undergraduate degree, followed by a Ph.D. at the University of North Carolina, Chapel Hill. Looking back, she fondly remembers a high school math teacher who taught her an important lesson in math. If Deborah turned in a messy paper, her teacher would pick it up and rip it into little

pieces. Deborah was too tough to get upset, and learned the important lesson of neatness and organization.

In addition to this wise advice, she has another message for math students today, no matter what challenges they may face. Don't give up. Keep taking math. Take lots of math. Take science courses, technology courses, and anything analytical. It may be harder, but it's well worth it. The high paying jobs, the fun jobs, take hard work like what she has shown. If they weren't hard, she says, they wouldn't be worth it.

Even for someone as successful as she is, a math career isn't all fun and breakthroughs. She writes papers that don't get published, applies for funding that doesn't get granted, and works on problems that, in the end, aren't worth the time they took to solve. Though she grew up without role models to look up to, she can serve as one for girls who like math today.

Deborah Glueck is a smart, perseverant individual who does real, difficult work on real issues. She doesn't expect life to make it easy on her, and, after all, she wouldn't have it any other way.

About the Student

Lucy Glueck is a 7th grade student at the Richmond Middle School at Hanover, NH. Her favorite subjects are Math, English, and Biology. She is working on her first novel and is learning German. In her spare time, she enjoys trail running, hiking in the White Mountains, and cross country skiing. She loves arts and crafts, especially drawing and metalworking. When she grows up, she hopes to become a scientist or an author.