Elaine Lee
Graduate Student
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1. **Where did you grow up?**

Houston, TX

2. **What do you do (i.e. what career or field are you in, what is the title of your position)?**

I'm a graduate student in biomedical engineering. I make heart tissue.

3. **How did you choose your career? When did you first know this is the career you wanted?**

In high school, I was good at science but my teachers were uninspiring until my senior year, so I used to be an English major. But when I got to college, I figured out I didn't really like being told what to write and read. I really liked my senior biology class in high school, but I hate memorizing things, so I decided a math-oriented field in biology was a better way to go. I knew I wanted to go into science for a career when I worked at the Texas Heart Institute and saw live surgeries of mechanical heart pumps implanted into patients and animals.

4. **Did your family support your decision to pursue your career?**

Initially my dad was a little disappointed that I didn't go into chemical engineering, like he did, or a major that required programming, like electrical engineering. He's since had a heart ablation (a surgery that kills off heart tissue that doesn't beat at the same pace as the surrounding tissue which makes the heart pump inefficiently) and tells me to hurry up and make that heart tissue.

5. **What is the highest level of education you have?**

Masters, and am currently working on my PhD.

6. **What is the highest level of education reached by other members of your family?**

My dad earned his masters in petroleum engineering.

7. **What is the salary range for a person in your position?**

$60,000/year ($29/hour) and up if you're in industry, but as a graduate student, my stipend is $25,000/year ($12/hour) and my boss pays my school tuition.

8. **What do you like most about your job?**

I like the flexibility in getting to decide where I want to take my project.

9. **What do you like least about your job?**

I dislike having negative results.

10. **What's an abbreviated day in the life of your job?**

Class in the morning, lunch time with colleagues, experiments in the afternoon

11. **In one to two sentences, how would you say you either use bioinformatics in your work? If you don't use bioinformatics directly in your work how has bioinformatics impacted your career field?**

My project requires cells to be selected out of a large population easily. We do this by using drugs, and those cells that make proteins resistant to the drug survive while all the other cells die off. We make these cells by transforming them with genetic material that carries a gene for drug resistance. Making the genetic material requires a lot of knowledge in molecular biology, which can include sequencing and analyzing the DNA and proteins.

12. **Do you have any recommendations for students who are interested in entering your field?**

Even though I hate memorizing, it's good to memorize some basic knowledge about cells, like how big they are. It makes estimating and planning experiments much easier. I'd also recommend to keep up with the writing classes. This job still requires a lot of persuasive writing to get grants, and a well-written grant with proper grammar and concise language (along with the good idea!) will get more attention.

13. **What are your favorite hobbies?**

Photography and dancing (ballroom, swing, salsa, Argentine tango)