Nobel Laureate Highlights Encouragement, Resilience, and Diversity

By Don Sutherland

On February 11, 2021, the International Day of Women and Girls in Science, the Nobel Prize Organization <u>interviewed</u> 2020 <u>Chemistry laureate</u> Dr. Jennifer A. Doudna. Among other things, she discussed the importance of mentoring, resilience in the face of setbacks, and the value diversity provides to science.

Excerpts from that interview are below:

Question: Did you have a particular person, a mentor or role model, who really influenced you?

Doudna: ...I did have some wonderful teachers. My biology and chemistry teachers in high school were very encouraging. I had multiple great professors in college who also encouraged my interest. My biochemistry professor in college gave me a chance to work in her lab over the summer, which was critical, where I really figured out, 'Wow! I love lab work. This is really great. This is exactly what I want to be doing.' When I got to grad school, I really got lucky. I got into a lab of a wonderful person who now is a Nobel Laureate himself, Jack Szostak. He was an incredible mentor, very passionate about science and encouraging for all of us that were in the lab at the time. I feel like I really lucked out.

Question: How do you cope with failure and with unexpected problems?

Doudna: I sort of have three ways of coping. The first is that I always remind myself to take a long view of things; something that's frustrating or disappointing in the moment, is it frustrating today or next week? I try to think about, 'How am I going to feel about this in six months or a year from now, or 10 years from now?' I also ask myself, in the scheme of problems in world, how big is this problem. Often it's not very big. I try to remind myself of the context and I try to remember all the things I'm grateful for. I'm fortunate that I have a family, that I've had the successes and I've had my career.

That takes me to the second thing; I do really rely on friends, family and colleagues and I've been so fortunate to have a really great network of people who I rely on for support...People that you can really build strong relationships with, I think is very valuable.

The third thing is because there was certainly some adversity when I was growing up in Hawaii, it sounds like a paradise, but it wasn't. There were a number of issues when I was growing up. I had to learn to rely on myself. I had to kind of find an internal strength to deal with bullying, to deal with all kinds of name calling and resentment...I kind of go to my inner core and I know that there's a part of me that no one can touch and that no matter what happens, I know that I know who I am. I know what I value. If there's adverse things going on there, there's a part of me that no one can touch that way. That gives me some strength as well.

Question: Today it's the International day for Women and Girls in Science. Do you think diversity is important in science?

Doudna: Diversity is really important in science. First of all, I think that if you want to have the best scientific outcomes, you need a lot of different brains working on it. We all come to science (or anything really) with different perspectives, skill sets, interests, passions and ways of approaching a problem. The more of that we have, I think the more likely there is to be interesting science that gets done and frankly, interesting solutions to real problems.