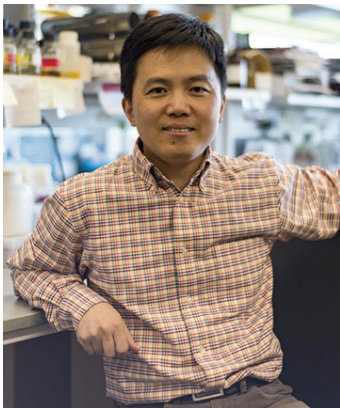


Interview with Ming Li Ph.D.



Dr. Ming Li is currently an assistant professor of Molecular, Cellular, and Developmental Biology (MCDB) at the University of Michigan. His research focus is the degradation and recycling center of the cell called a lysosome, and its regulation and recycling mechanism. Dr. Li obtained his bachelor's degree from Fudan

University in Shanghai, China, and he conducted his graduate studies at the University of Massachusetts Amherst under the guidance of Dr. Danny Schnell. Before becoming an independent investigator here at Michigan, Dr. Li completed his post-doctoral training at the University of Massachusetts Amherst and Cornell University.

Ziheng Xu (hereafter Ziheng): Good morning Dr. Li! Nice to see you. So to get us started, I am wondering if you can tell us more about your research interest?

Dr. Ming Li (hereafter Dr. Li): Sure! I study lysosomes, and I am really interested in lysosomal function and regulation. A lysosome is the digestive organelle within the cell, and we know a lot already about how to build the lysosome. But then we know very little about once the lysosome is built, how do the cells regulate its function, and if the lysosome is damaged, how do the cells remove the damaged portions to keep a healthy lysosome? This is basically what I am interested in. Currently, my particular interest is focused on the lysosomal membrane. There are many lysosomal transporters on the lysosomal membrane that are very important for the lysosomal function. My interest also lies in how do the cells regulate the functions of the lysosomal transporters. Especially once the transporters are damaged, how do cells fix this problem, or remove the transporter? This is my major focus for the next few years.

Ziheng: That sounds fascinating, and it makes me wonder

when did you realize research was the career path for you? Was it challenging at first?

Dr. Li: That happened during graduate school. When I was an undergraduate, I had a little bit of experience. I was not sure that research was for me, but my research experience was enough to motivate me to go into graduate school to find out if research was truly for me. Then I came to the US for graduate school. Pretty much in the first semester, when I started doing lab rotations, I found research is really, really fun, so I really enjoyed it. I think at that point, I knew for the next five to ten years, I will be doing research. Then it is a step-by-step thing. After I completed my PhD studies for my post-doc, I still found it (research) a lot of fun. So yes, after a long time I decided I really want to do research. Looking back, the turning back is early graduate school, and then I got the confidence from my post-doctoral training. I feel like all along the way, you can enjoy doing science.

Ziheng: That is an interesting story, and since your passion towards research developed along the way, I am wondering for us undergraduate students at our stage, what is your opinion on getting involved in research?

Dr. Li: That is absolutely a great thing! I mean different labs have policies regarding undergraduate research, and I think in my lab, I have a new lab, and there are five undergraduates working. I really like having undergraduate students in my lab. The good thing about having undergrads is they can really help you; they are passionate. They might not be extremely well-experienced but they have the passion. If you give them enough guidance, it is a win-win situation: for me, I have more people working in the lab, and for the undergraduate students, I think the earlier you find out what real research is, the better for you. In my case, I figured that out when I was a graduate student. But I think if you realize if you want to do research earlier, it is even better. Or if you don't like it, it also works, so that you don't have to waste your time.

Ziheng: Those are very good points. What advice do you have then for the students who have not gotten into research yet?

Dr. Li: Yeah definitely. UROP is one of the programs. The

thing is you have to ask yourself: do you really want to do it? Or do you have enough time, and are you curious about research? If you think you want to give it a try, I would say be brave. You have to contact the faculty members, you have to visit their websites, go through their research, and then think about if you will be a good fit or not. Then just be brave and you just need to write them an email. You know a lot of times you might not get a response from them, but I would say in my case I am very good at responding to emails. Also keep your faith, if you don't get response from one [professor] then try a different one. So really, you have to make up your mind and then do it.

Ziheng: Sounds good. Lastly, what advice do you have, if you do, for the students who have already started their research?

Dr. Li: Of course. Number one: be respectful. Make a schedule and try to stick with the schedule. You do not want to find excuse not going to the lab. If you decide to do research, then you got to do it. Because you will learn something from it. Otherwise if you do not take it

seriously, you will not learn much from it. Why wasting your time doing that? Second is try to find a mentor who will take you seriously. Of course, if you join a lab, it is very unlikely that you will work directly with the professor. But you can match yourself with a good graduate student, or a post-doc, who is willing to guide you. That is very important, because otherwise if you join the lab, and nobody is teaching you anything, it will be very difficult, especially at the beginning. So, find a good mentor, and it does not have to be the PI [Principal Investigator], it can be a graduate student or a post-doc. Last but definitely not the least, do not be discouraged by failing experiments. Failing is very common. Be positive about what you are doing. Especially when you are not giving up and you figure something out, that reward, is priceless.

Ziheng: Thank you so much for these valuable advice, Dr. Li, and I really appreciate your time interviewing with us!

Dr. Li: Thank you!