

AAUTY VIDEO SERIES: 2020 TEACHER OF THE YEAR: ASSOCIATE PROFESSOR JACK WANG

INTRODUCTION AND BACKGROUND

Hello, I am Jack Wang, a microbiologist and science educator. Quite new to YouTube, I launched the biolab collective channel to showcase the techniques we use everyday to answer the big questions in science and medicine. I train as a scientist in the field of molecular biosciences. The study of microscopic organisms and molecules and how they influence our lives. I was recently recognised as the Australian University Teacher of the Year by the Australian Awards for University Teaching (AAUT). Today, I will try to tell you about my approach to science education, how I navigated my teaching career to this point, what this award means and how it impacts the direction of this channel.

WHY DID YOU BECOME A SCIENCE TEACHER?

During my post-graduate training, I was spending close to 100 hours a week working on a research project that I personally found fascinating, studying the molecules pathogens use to infect human cells. However, every time I tried to explain the specifics of what I was working on to my family and friends, a blank look fell over their faces. Even though I had the knowledge and enthusiasm, I didn't have the communication skills to make people care about the work I was doing.

I wanted to showcase the possibilities of scientific research to as many people as possible. That's why I became a science teacher.

WHAT IS YOUR TEACHING FOCUS? HOW IS IT DIFFERENT?

For the past 10 years, I have worked at the University of Queensland in Australia where I am currently an Associate Professor in microbiology. My teaching focuses on training students to become citizen scientists who can communicate in this digital age. I designed large classes that allow thousands of students to discover the new germs on the human body and create videos and podcasts about this for the general public.

I also work closely with the Australian Society for microbiology to provide online communication training for early career scientists all over Australia. The scope and scale of these initiatives over the past 10 years lay the groundwork for my award application.

HOW DID YOU APPROACH TEACHING AWARDS APPLICATIONS?

I am very fortunate to work in an institution where all my mentors are national teaching award winners. But this did set the bar very high. I felt a little overwhelmed early on, but at the end of the day, it comes back to the basics: what happens in the classroom. I dove head first into many different styles of teaching: lectures, laboratory sessions, workshop, tutorials. It didn't matter if there were small or big classes. I just needed more reps and experience.

I collected data for everything I tried and over time this turned into research papers, conference presentations and national collaborations with science educators. Piece by piece, I built a diverse teaching portfolio, which gave me enough, I think, to start applying for internal teaching award at my university.

It was tough going early on but each time I was knocked back. I would use the feedback to sharpen the focus of my teaching before trying again. I went through the cycle a few times every year. And about 5 years in it, it clicked.

I won school, faculty and university wide teaching awards and consecutive years that then led on to a national citation, a national teaching award endorsed by the Australian society for microbiology and now a national AAUT award for teaching excellence. None of this will be possible without the formative teaching experiences early in my career.

HOW HAS THIS AWARD IMPACTED YOUR CAREER?

I didn't become a teacher for the recognition. I don't think any teacher does, but we need to constantly compete for our work to be visible. This teaching award doesn't just highlight my own work, it also validates the experiences of my students. I think that is very powerful. Everyone has an opinion about how teaching should work and we are always being told that we should do things this way or take a different approach altogether. Teaching awards are something concrete we can point to, as affirmation that what we are doing is working. Being named the University Teacher of the Year has led to invitations to speak at international conferences, national media attention and the opportunity to serve on committees that shape teaching policy across my university. All of this will allow me to double down on what got me here, innovating in my classrooms. The creative freedom to pursue what I want to do in teaching is a bit of a luxury and hopefully this award affords that opportunity.

ADVICE FOR FUTURE APPLICATIONS?

It doesn't matter how new you are to teaching. I would encourage all teachers to apply for recognition in your own context. No one knows what is happening in your classroom unless you tell people about it in a compelling way. It is the same dilemma I faced in my PhD that started my career in teaching: how do you get people to care about your work. The best piece of advice I can give to aspiring applicants is to find the motivation that explains why you became a teacher in the first place, your origin story if you will and how this influences your teaching philosophy, measure the impact of your teaching through your student learning, collaborate with other teachers and continue to hone your craft. It all starts somewhere and every teacher has a compelling story to tell.

WHAT'S NEXT

What's next I plan on making more videos on laboratory skills and techniques as well as some day in the life style videos for scientists. If we are ever allowed to travel again, I want to bring you along to conferences I am speaking at and we can share that experience together.

Hope everyone is doing okay and staying safe. Bye for now.

AAUT CONTACT DETAILS

Click [2021 AAUT Awards](#) for more information.

For any further questions, please contact the Awards Team aaut@rmit.edu.au