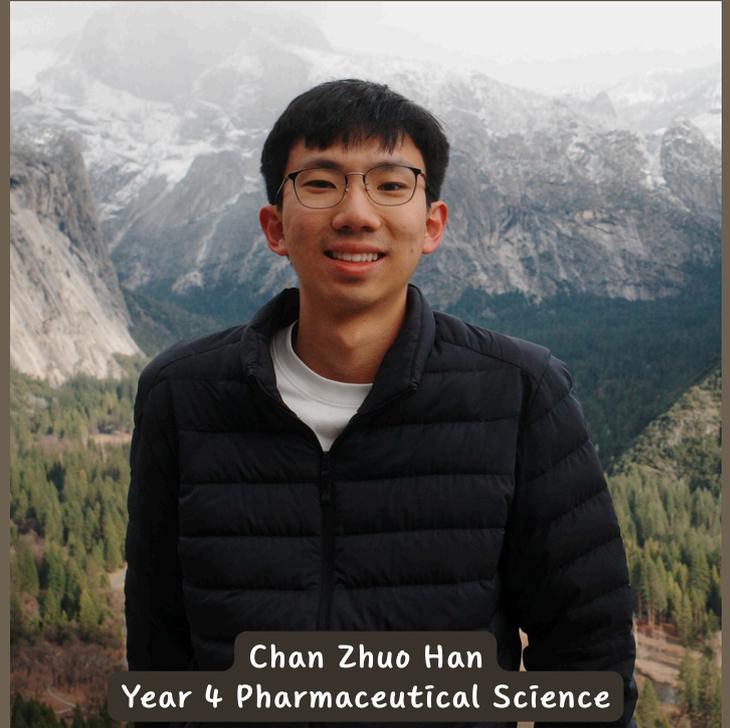
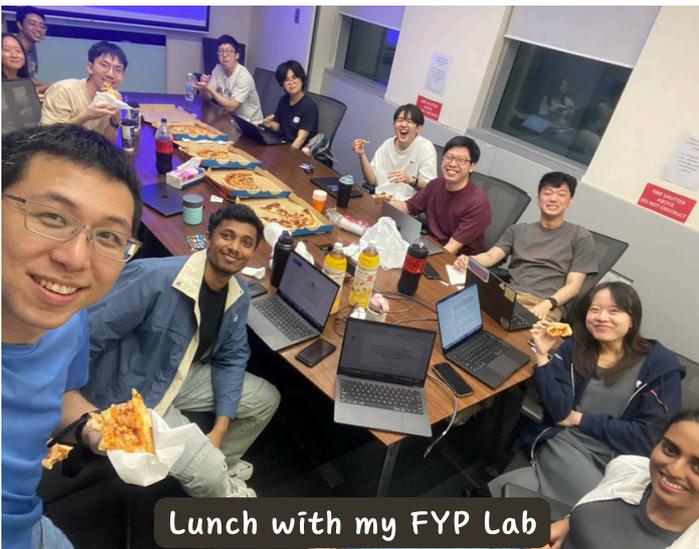


Why study Pharmaceutical Science? And how has the journey been thus far?

My love for chemistry led me to Pharmaceutical Science at NUS. This programme has taught me to look beyond theory and see how biology and chemistry work together to advance healthcare and drive the development of new therapies. I discovered a deeply multidisciplinary journey spanning biology, regulatory science, formulation technology, and biotechnology. Team-based learning fostered close collaboration, idea sharing and broader perspectives, while hands-on courses translated theory into practice through formulation design, tablet compression, and specification testing.



What interests you most in your studies?



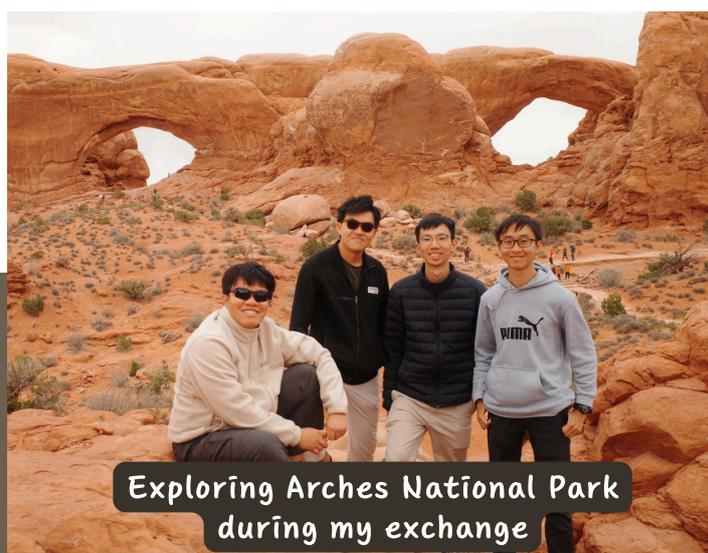
I am particularly interested in applying computational methods to drug discovery and development — an intersection of my Major in Pharmaceutical Science and Second Major in Data Analytics, complemented by a Minor in Computer Science. To delve deeper, I am undertaking a Final Year Project (FYP) under Dr Tan Kar-Tong, where I am developing a computational pipeline to extract ribosomal alterations from sequencing data in cancer cell lines.

Although learning the prerequisites has been challenging, this project has given me the chance to conceptualise and execute a research study from start to finish. It has sharpened my critical thinking, problem-solving abilities, and independence in tackling complex computational challenges, which are essential for my academic growth. I am grateful to my mentors for their patience and continual guidance throughout this learning journey.

Apart from academic lessons, what other programmes (e.g. UPIP, UROPS, NOC, SEP, Summer/Winter Schools/Research/Internship, etc.) did you participate in? And how did the experience(s) benefit you in your (a) personal growth and development, and (b) academic pursuits?

I pursued a research internship at A*STAR's Bioinformatics Institute in Year 2, where I built machine learning models to predict binding affinity between antibodies and antigens and learned data science techniques for modeling complex biological relationships such as protein-protein interactions. Although the work differed from my classes at the time, my biochemistry foundation from the Pharmaceutical Science curriculum helped me understand the data's context and complete the project successfully.

In Year 3, I went on an exchange programme at the University of California San Diego, which was one of the most enjoyable experiences of my undergraduate life. Living independently in a different culture was eye opening, and I appreciated seeing how classes are conducted abroad and engaging with students from diverse backgrounds. Outside academics, I loved exploring the natural beauty of the United States by driving to national parks and hiking through stunning wilderness areas.



What advice do you have for the incoming students or juniors?

Be open to new ideas and mind and never stop exploring. I was initially motivated to pursue Pharmaceutical Science because of my passion for chemistry, but after starting a Second Major in Data Analytics, my interests gradually shifted toward a new frontier in drug discovery that uses data to optimise the development process. Even though this field is still emerging and opportunities were not always easy to find, I stayed the course and was fortunate to discover meaningful work through my UPIP and FYP. What began as an unconventional path led me to deeply engaging research that combined my interests in pharmaceutical science and computational methods in ways I had not anticipated.