



**Pun En Xin**  
Year 3 Pharmaceutical Science

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

I have always been intrigued by the science behind how things work, and pharmaceutical science allows me to apply that knowledge to enhance health outcomes. I aspire to make a significant contribution to the healthcare industry, whether through drug development or optimising treatment methods.

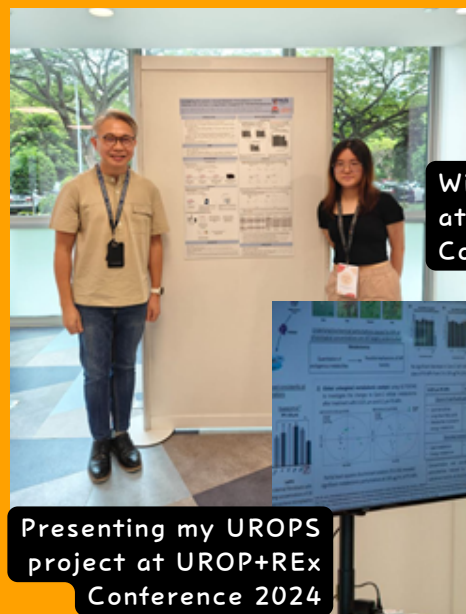
The journey has been both challenging and rewarding. The professors have a wealth of knowledge in the pharmaceutical field and often relate the material to real-world scenarios, which enriches our learning experience by highlighting practical application rather than just memorisation. Thanks to team-based learning (TBL), the tutorials are engaging, providing opportunities to collaborate with and learn from my peers.

## What interests you most in your studies?

It's thrilling to see how classroom concepts are applied in real-world scenarios. During my internship at the Genome Institute of Singapore, I was involved in analysing gene expression data to identify potential drug targets for cancer. I witnessed first-hand how the theoretical concepts of gene expression, protein function, and drug-target interactions played a vital role in comprehending the fundamental mechanisms of cancer and developing possible treatment strategies.

**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?**

During my second year, I undertook an Undergraduate Research Opportunities Programme in Science (UROPS) project supervised by Prof Eric Chan. My research centered on exploring the metabolomic impacts of microplastics on human intestinal cells. This opportunity enabled me to enhance my laboratory skills and sharpen my research and analytical expertise, particularly in experimental design and data analysis. Furthermore, I showcased my findings at the UROP+REx Conference 2024, where I gained valuable experience in effectively communicating complex scientific concepts to a diverse audience.



**With Prof Eric Chan  
at UROP+REx  
Conference 2024**

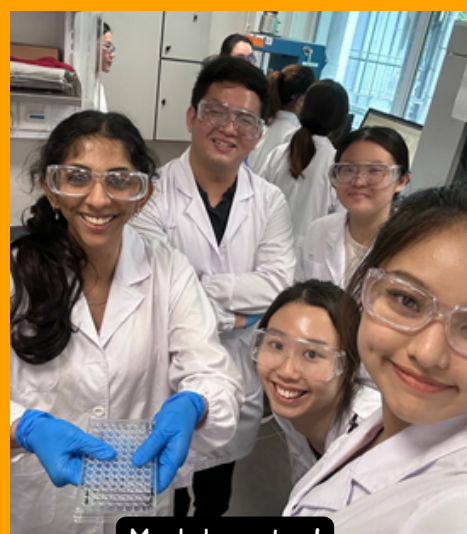
**Presenting my UROPS  
project at UROP+REx  
Conference 2024**

**What other interesting activities did you partake in to further enrich your student life, e.g. extra-curricular activities on campus (e.g. NUSPS, House, etc.)?**

I served as the Logistics Head for Pharmacy Flag (RxFlag), the volunteer wing of the Pharmacy Freshman Orientation Programme. In collaboration with Life Community Services Society, we organised activities for children from underprivileged backgrounds. These activities included long-term initiatives such as pen pal programmes, as well as interactive sessions such as scavenger hunts, and arts and crafts, with a focus on pharmacy or science themes. Through my involvement with RxFlag, I connected with fellow Pharmacy students while positively contributing to the community.



**After a RxFlag beneficiary event with children from Life Community Services Society Sengkang**



**My lab mates!**

**Share with us your most memorable experience as a Pharmaceutical Science student.**

My cherished memories come from the laboratory courses. During our first course, we engaged in synthesising active pharmaceutical ingredients (APIs), and witnessing the product take shape was both thrilling and fulfilling. In our second course, we delved into pharmaceutical biology and formulation science, with the highlight being the creation of our own tablet formulation. As a team, we designed the formulation, produced it, and tested its properties, truly bringing the entire tablet development process to life.

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

Stay curious and seize every opportunity to learn. Don't hesitate to ask questions or seek assistance from your professors and classmates. Additionally, take time to explore the various pathways within pharmaceutical science. Beyond research, there are numerous opportunities waiting to be discovered. For instance, I am currently participating in the Undergraduate Professional Internship Programme (UPIP) as a Clinical Marketing intern at Auristone, a biotech startup. This position differs significantly from my previous lab-based experiences, and it has been an eye-opening journey. Make the most of your time here by trying out different fields to find the path that resonates with you the most!