

FIND *your* FUTURE

Name: Miao JIN

Job title: Senior Scientist

Current employer: Novartis

Course studied at UCL: Pharmaceutics

What is the core purpose of your role and its typical activities? What are the goals of your organisation?

My major emphasis is on early phase formulation development and solid state chemistry. My responsibilities in Chemical and Pharmaceutical Profiling (CPP) are to:

- Enable small molecules through toxicology and into clinical studies with the correct formulation strategy
- Ensure timely delivery of the best technical path
- Conduct developability assessment at GATE review

I have also been involved in evaluating advanced functional excipients, new formulation design and research on new absorption routes. In addition, I actively organise interface forums cross-functionally.

What sort of person would this role suit? (i.e. personal skills, qualities and values)

To better expose yourself in a global team, collaboration and communication are two keys skills.

What are the best aspects of your work and what are the most challenging?

In the early phase, especially in the exploratory phase, my role was involved in the team. That's where the story begins. The role has to follow each storyline, be deep in each mechanistic pathway (the target, in vitro/in vivo assays, safety etc.), plan the strategy for the compound to achieve the toxicity dose and recommend the strategic formulation principle to the clinic. The challenge is that many lines (disease areas) have to be followed up. We have to always keep learning.

In a global company, innovation via collaboration is also the key element. If you have an idea and would like to set up the platform aligning the line function strategy, you have to submit the proposal to review and also seek potential collaborators. In our innovation project, it was really tough at the beginning to start from nothing. So just remain patient and communicate with the project teams who may have an interest. We

have already set up the platform and attracted the project teams from early to late phase.

What kind of people and clients do you work with?

I work with the global project team; this includes chemists, biologists, pharmacologists, chemical engineers, formulators, project managers etc.

How did you get to where you are now? Are there typical 'entry' routes into your profession for new graduates? Are additional qualifications desirable or required?

For the first year, I was always in the lab and followed senior people to practice and learn. In the second year, when I have learned all the core activities of the team, I started to independently support the project leader and learn how to manage the project. In the third year I became a project leader, which is my current role.

On reflection, what aspects of your UCL degree do you feel were of particular benefit in securing graduate work and in carrying out your current responsibilities?

In a global company, UCL is a great brand. I found lots of UCL alumni working at Novartis, providing a good opportunity to make connections and to form trust and collaboration.

How should current students go about getting the necessary skills and practical experience to help them with their future applications to your sector (e.g. internships, training courses)

Be strong with the technical skills (science) and also soft skills (communication, collaboration).

Do you have any final advice for current students?

Keep learning and enjoy the moment you have now. For career development, you can start to think about what you really want to do. Think whether you want to go to a lab or not. If not, I would recommend going to late phase (clinical trial), e.g. data operations, regulatory affairs, medical writing, project management, clinical research associate etc.