

GSK visiting report

I have heard about the so called GSK visiting program for medical students one year ago, however; it is hard to believe that this dream came true and happened on me.

Speaking of the pharmaceutical companies, firstly it came out the famous drama, Prison Break. "The company" is so huge and involves so many government officers, military staffs, spies, mysterious business traders and even some mad scientists. That's my imagination in the past times.

It is really my great honor to get this wonderful chance to have the trip not only to visit Singapore but more importantly to take a look so closely to GSK, such a top pharmaceutical company in the world. First day, Jessica and Monica took all of us together ready to CKS airport. I chatted with all the other partners, other medical students, every minute during traffic moving. There are so many excellent and charming people who study in other medical school that I could never meet them without this chance of visiting. After arriving to Singapore, we immediately headed to the CGH, a middle hospital in the east of this country, and have a tour to take a look to many departments such as the class A, B, and C OPDs, hospitalization wards, offices, and the place where experimental pharmaceutical safety (clinical trial phase I) were tested. My reflection was that Singapore is really a place of efficiency and fairness that fit a proverb, as you sow, so as you reap. It's really economical and fair.

The next day, which is really an academic day, we went to the GSK AP office to have a whole day lectures involving a variety of aspect about the pharmaceuticals. It is a day full of knowledge that I explosively broaden my mind and enriched my knowledge. Take some notes about these as follows. It is often repeated again and again that the efficiency, safety and quality are the three core stones of a drug, and the post-clinical development include: define target patient population, selection of dose range, study designs, choosing comparator, pushing to global and GCP (good clinical process) standards, and finally data management. Mentioned about “post”-clinical, compounds discovery and pre-clinical were of course also introduced. Besides, about the clinical trial phase I, II, III, which is also an issue recently in Taiwan’s H1N1 influenza vaccines, were also explained in detail such as the goal, method, appropriate numbers of volunteer patient.

We also have learned about the notorious medication problems happened in past centuries. Thalidomide in Brazil is an example that discussed about. There are still many other issues about justice in the whole science and medication system, such as the experiment volunteers were often poorer people due to economical status and so on. Though I am not the person who can change the world or even influence the policy determination, being awareness of the fact of the real world might someday somehow be useful.

Then we had a meeting with an elegant MD working in GSK and she shared her

experience about what role could a doctor (MD) plays in pharmaceutical company.

There are also another three aspects she presented, and these were pharmacovigilance, clinical trials, and medical affairs. First one and also the most important one is the pharmacovigilance, which is the safety surveillance. Safety again is also focused in the clinical trial aspect. SAE (severe adverse effect) is important and need to be reported to not only center of the company but also government departments, FDA, EMEA, Japanese PMDA etc. The last but not the least lecture is about oncology target therapy drugs. It is truly challenging and interesting development in science but some issues such as OS (overall survival) versus PFR (progress free rate) were also thought and brainstormed by every participant.

The GSK center of research in cognitive and neurodegenerative disorders in Biopolis and vaccine factory/lab are the destination of our third day. After a long traffic in the beautiful garden city in Asia, we entered the research center and have an introduction by a brilliant English gentleman. As I like reading and having a variety interest in different areas, I thought this place is kind of like the GOOGLE, INTEL and some other great company's R&D departments. Here the outstanding chemists and biologists of different profession were pooled together, mixed office to encourage conversations and have brainstorm together very often. The lab is also an art like LEGO. Pipes, lines, tubes and ceiling were all removable for some purpose. The safety and efficiency were both considered in strategy. It is a fantastic place for scientist to work in,

and I believed that this wonderful environment attracts many excellent staffs. Then we took vehicle to the factory. At the minute we stepped in the guarding room, a huge but plain building demonstrated in front of us. After entry, we were all really very amazing about how big this building is! The factory/lab is so big and there are so many well designed sterile and safe procedures. All of the machines were so high-technology and we were impressed how delicate a vaccine is produced by GSK. Although the vaccines somehow were not benefit for the company such as some vaccine for diseases in Africa, GSK still did research and produced them for charity.

It is really impressed me that how scientific and high-technology a company could be. Besides, it is worth respect that charity is also accompanied. I am really grateful to my teachers and chief of department of medicine, CGU, who chose me as a candidate, and I am also appreciate GSK staffs to give me this invaluable chance to learn, to step in, and to realize about pharmaceutical company. Every time I have my clerkship in ward caring patients, every order of medication for me won't be taken for granted that simply. Drug itself has its long special history. Hope every one of us in the world have a better and longer life in the future.

Yenping Kung in 2009/9/6



Day 1



Day 2



Day 3