



**Faculty of Medicine Siriraj Hospital,
Mahidol University**

Siriraj Resident/Fellow Exchange Program

(To Oregon Health & Science University (OHSU))

United States of America

(Period of visit from 13/1/20 to 7/2/20)



Name: Tachapol Virunhagarun

ID: 10031771

Study Year: 3rd year Hematology Resident

Overseas Clinical Elective Rotation Final Report

1. Introduction

My name is Tachapol Virunhagarun. I graduated MD from Faculty of Medicine, Siriraj Hospital, Mahidol University in 2016. Then I was an intern at Sena Hospital, Ayutthaya for 1 year. After that I joined a Hematology residency program at Siriraj Hospital during 2018-2020. Currently, I am the 3rd year resident in this program.

The reason why I want to become hematologists is because I think that hematology covers a wide breadth of topics that relate to both malignant and non-malignant diseases. This wide spectrum makes hematologists important in advancing the research and treatment of patients with many diseases. This holistic approach to clinical haematology is an intensive, exciting, rewarding but demanding specialty that encompasses both clinical and laboratory practice. As a result of this dual role, hematologists take an active part in every stage of patient management, from initial clinic visit, to laboratory assessment, diagnosis and finally to treatment. All of those things make me feel intellectually challenged in a positive way.

2. University Review

Oregon Health & Science University (OHSU) is a public university in Oregon with a main campus, including three hospitals, in Portland, Oregon.

The main campus, located on Marquam Hill (colloquially known as "Pill Hill") in the southwest neighborhood of Homestead, is home to the university's medical school as well as two associated hospitals. The Oregon Health & Science University Hospital is a Level I trauma center and general hospital; Doernbecher Children's Hospital is a children's hospital which specializes in pediatric medicine and care of children with long-term illness. The university maintains a number of outpatient primary care facilities including the Physician's Pavilion at the Marquam Hill campus as well as throughout the Portland metropolitan area.

A third hospital, the Portland Veterans Affairs Medical Center is located next to the main OHSU campus; this hospital is run by the United States Department of Veterans Affairs and is outside the auspices of OHSU.

The reason why I chose to have experience at OHSU is that there has highest quality of patient care, research, and educational activities and also OHSU is partnered with Mahidol University, specifically Siriraj Medical School.

3. Expectation and Objective

During the past three years, when I was training as hematology resident, I had an opportunity to taking care of patients who need a bone marrow transplantation (BMT). To understand the application of BMT thoroughly is my interest, since this Bone marrow transplantation is among the greatest success stories in cancer care. It has boosted cure rates for some blood cancers from nearly zero to 90 percent. OHSU Knight Cancer Institute is the famous institute for BMT center in USA. My expectation of this elective course is to learn how to manage BMT patient in the different way and bring back any new way of treatment or new medications that can further develop to Siriraj BMT unit. Besides, I want to gain experience living abroad and improve my ability in many aspects such as language, creativity, and self-esteem.

Moreover, I expect to see how is the residency and fellowship training in another school in another part of the world and I want to learn more about health system within USA benefits and drawback from their system.

4. Knowledge/Experience gained

I was arranged to attend rounding at many wards including BMT unit, Inpatient Consult Service and Outpatient Clinics with various attending & fellows.

- BMT unit:

During my first week, I was supervised by Dr. Sarah Nagle, Dr. Nagle's clinical focus is caring for patients with lymphoma and multiple myeloma who are undergoing stem cell/bone marrow transplant. She is one of the Dr. Richard Maziarz team, who is medical director of the adult blood and marrow stem cell transplant and cellular therapy program in the OHSU Knight Cancer Institute. Dr. Maziarz is the senior investigator for the CTL109 clinical trial that led to approval of the drug name, Kymriah, the first gene transfer therapy available in the U.S. It uses chimeric antigen receptor (CAR) T-cell therapy, a form of immunotherapy in which the patient's own blood cells are collected, genetically engineered to attack B-cell lymphoma cells, then infused back into the patient. This therapy appears to offer a single treatment that can relieve

symptoms and save lives for people who had otherwise faced a very poor prognosis. I really glad that I had the opportunity to experience (CAR) T-cell therapy that I have never seen before. BMT ward has a lots of facilities such as real time monitoring and transplant area with HEPA filtration to block germs and lower the risk of infection. Transplant unit in OHSU Hospital has 30 private rooms. They also have multidisciplinary team including physician, specially trained nurse, pharmacist, dietarian which attributed to achieve holistic care of the patients that contribute to very good outcome.

- Inpatient Benign Hematology Consult Service

During this two weeks, I was supervised by Dr. Vinay Prasad and Dr. Ro Mannino. They manages patient in holistic care manner. I also had opportunity to attend conference including Hemostasis & Thrombosis Conference and Fellows' Tumor Board. The Hemostasis & Thrombosis conference is this conference aim to challenge staffs and fellows to give differential diagnosis and management in difficult cases. Fellows' Tumor Board is an activity that allow any fellows in the department to bring inpatients or outpatients to demonstrate and discuss for management with attending.

- Outpatient Benign & Malignant Hematology Clinics

I had a good change to observe with various attending and see a lots of patients. Some patients had a disease that I have never seen before such as sickle cell anemia.

From my observation, there were some differences between Siriraj hospital and OHSU.

1. Most of the medical recording system were electronic which made it very easy for data management and also very useful in term of research data gathering.
2. OHSU has more facilities than in our hospital. They can provide faster investigation such as TEE, CT or PET scan within couple days. They has more staff and medical care providers and that make less workload than ours.



5. Benefits

For me, I have improve both of my clinical knowledge and language skills at the same time. I gain a lots of experience in novel treatment in hematology field in the leading country that I have never seen before because of some drugs are not available in Thailand. Otherwise, I have seen an advanced facilities and training BMT unit that provide comprehensive stem cell transplant services. Importantly, I also make a lots of new friends that I can share experience and knowledge. This exchange program provide me an opportunities to have great relationship and connection between attending professor and resident friends. I believe my experience and this relationship will provides benefit to our institute, and also, to me in continuing study abroad in the future.

6. Life in abroad

The hematology team was very welcoming. They greeted me with a meal and coffee and we discussed about my expectation during my stay since the very first day I arrived.

During my stay, I have to work from 9 a.m. to 16 p.m. I had a chance to go to Seattle on weekends and I really enjoyed my trip.

Since OHSU did not provide any accommodation, I had to rent a house from airbnb that quite far away from the hospital. However, the public transportation in Portland is very well-constructed and convenient. So, it took only 30 minute for me to go to OHSU in the morning via tram. Google maps are very useful apps and worth to download because it show real-time schedule for bus and tram.

Despite Portland is a rainy city so, I need to carry umbrella with me all the time.



7. Future plan

Right now I am still seeking the best place to work after graduate. I think the experience at OHSU is a good preview of my career and future. I am interested in targeted treatment. For me, working in developing country can provide exceptional clinical care and advance the field while maintaining a healthy work and life balance.

8. Recommendations

If possible, it would be great to extend the period of studying abroad to more than 4 weeks in order to gain more experiences and attend more academic activities.

Plan early about the visit, as the contact process and document preparations take time. Also, there are many health status check and investigations that have to be done.