

Learning Report

Chui's Student Excellence Scheme Ho King Chun Leadership Fund

With the support of Chui's Student Excellence Scheme Ho King Chun Leadership Fund, I have attended the Special Clinical Electives Program at National University of Singapore from 16th April, 2018 to 11th May, 2018.

In the past year, I have written a research paper titled "Impact of the Topology of Brain Microbleeds on the Structural Brain Network" under the supervision from Dr. Sai-Kam, Hui, Research Assistant Professor from the Department of Diagnostic Radiology, the University of Hong Kong. The study aims to explore the impact of the distribution of brain microbleeds (BMBs) on the structural brain network in patients with stroke or transient ischemic attack (TIA). Patients with strictly lobar BMBs (n=32) and deep/infratentorial BMBs (n=31) were compared against the control (n=31), in which the study was matched for age, sex and hypertension status. The study shows that the disruption of structural brain network caused by strictly lobar BMBs may be the underlying mechanism of impaired cognitive function in patients with stroke or TIA, and that brain network analysis is a promising biomarker to assess the presence and severity of cognitive impairment. In this Special Clinical Electives Program, I have presented and shared the findings of this ongoing with professors, doctors and medical students in meetings.

In addition, in these research meetings, I have gained valuable knowledge about the cutting-edge technology applied in the field of radiology, both diagnostic and interventional branches. I have the opportunity to appreciate how magnetic resonance imaging could be used to accurately predict disease progression and prognosis. I also learnt much more about transarterial chemoembolization (TACE) used against hepatocellular carcinoma (HCC).

Apart from the research aspect, I have achieved several goals in the clinical field. I was given the opportunity to complete x-ray, computed tomography, magnetic resonance imaging, and ultrasound reports under guidance from doctors in the Department of Diagnostic Radiology. I also participated in multi-disciplinary meetings, where radiologists present and discuss complex cases with physicians and surgeons from other specialties. I was also required to discuss with radiographers, nurses and other allied health professions on how the medical field could improve radiologic service provision.

With supervision from Dr HY Loi, I have further understanding of the clinical indications for images, the relative risk/benefit of radiologic procedures and the basic technical aspects of how radiologic examinations are performed. I have also appreciated the role of radiology in clinical medicine. More importantly, I have better knowledge about diagnostic limitations

and how these parameters affect patient care. I have refined my skills to recognize radiological presentation of common problems.

Ho King Chun Leadership Fund had greatly benefitted my learning through supporting me in the Special Clinical Electives Program at National University of Singapore from 16th April, 2018 to 11th May, 2018. It is my goal to be a clinical radiologist specializing in the field of interventional radiology, so as to contribute to the Hong Kong society which has nurtured and cared for my development. The Fund had provided me with the chance to prepare myself to the best of my ability. I would like to take this opportunity to express my sincere gratitude to Chui's Student Excellence Scheme.





