Seminar B

Advanced Technology in Primary Care

Dr. Benjamin FANG

FHKAM(Radiology), FHKCR, FRCR, MBBS (HKU)

Associate Consultant in Radiology

Dr. Benjamin Fang is an Associate Consultant radiologist in Queen Mary Hospital. Apart from providing diagnostic and interventional services in the hospital, he has a strong interest in IT related matters and codes in his spare time. He serves in a multitude of IT related roles in the hospital, Hong Kong College of Radiologists and Hospital Authority Head Office, where he works at both the administrative and also the technical level. He has worked closely with Hospital Authority Head Office in developing artificial intelligence tools which had been successfully put to everyday use in radiology departments.

Artificial Intelligence in Radiology

The development of AI has made great strides in the past decade. In certain computer vision tasks, AI had already surpassed human performance. In radiology, AI is poised to dramatically alter the way things work. In this session, the speaker will briefly cover some of the recent advances in AI in radiology. He will also share with us his work with HAIT&HI in using AI to triage non-urgent CXR requested by GOPCS which had led to dramatically reduced report turn-around time for exams that warrant early clinical attention.

Ms. Heidi H.Y. CHENG

Prosthetist and Orthotist

Ms. Heidi CHENG graduated from The Hong Kong Polytechnic University with a Bachelor degree in Biomedical Engineering in 2012 and The Chinese University of Hong Kong with a Master degree in Geriatric Orthopaedics in 2016. She is a Certified Prosthetist and Orthotist (HK) who has worked as a Prosthetist-Orthotist in Pamela Youde Nethersole Eastern Hospital (PYNEH) since 2012. She is actively involved in the 3D printing team in P&O department of PYNEH to provide 3D design and printing service.

Application of 3D Printing in Clinical Setting

3D printing is the additive manufacturing process of making three dimensional solid objects from a digital file. Different industries including the medical field have been benefited and enhanced through the utilization of 3D printers. 3D printing applications in clinical setting cover various aspects, including development of custom-made prostheses, assistive devices, surgical cutting/drilling guides/tools, as well as patient-specific models of bones, organs and blood vessels, etc. These applications allow both the healthcare professional and patient an evolving experience from assessment, planning to treatment compared with the past.

In this session, you will obtain more information on:

1. Introduction of 3D printing technology
2. Current practice and applications of 3D printing in the medical and P&O field
3. Future possible development of 3D printing applications in primary care