A region-wide symposium on Electrophysiology was recently held in NUH and conducted by our visiting lecturer, Professor Graham Holder of Moorfields Eye Hospital, London, United Kingdom. Professor Holder is a world-renowned expert on electrophysiology studies of the eye, and is on the editorial boards of the British Medical Journal and Documenta Ophthalmologica, having published over 200 publications and book chapters on the topic. He is also the current Director of Electrophysiology at Moorfields Eye Hospital, and also the Director of Education of the International Society for Clinical Electrophysiology of Vision (ISCEV).

Electrophysiology is a fundamental and indispensable investigation for assessing retinal and optic nerve function. It gives us irreplaceable insights into the root of retinal diseases as well as enlightens us with regard to the diagnosis of a variety retinal and neural-ophthalmic diseases. Electrophysiology studies comprise a series of complex tests involving electrodes attached to the eye and the skin around the eye, and exposure to different intensities of light. The function of the retina is then interpreted from the various electrical waveforms emitted by the nerve cells in the retina and optic nerve. These tests are carried out by experienced and skilled personnel, and ophthalmologists are usually trained in this field for accurate data interpretation and reporting. Professor Holder’s visit to Singapore coincided with the setting up of a new Electrophysiology facility in NUH earlier this year. This state-of-the-art facility is currently running a full service and is the latest addition to the many other services offered at the ophthalmology clinic in NUH.

The half-day symposium was well attended by participants from local hospitals as well as from neighbouring countries, including fellow medical retinal colleagues from Malaysia. This year, the program aimed to provide attendees with an overview of the principles and clinical applications of electrophysiology,
updates on the clinical relevance of electrophysiology in neuro-ophthalmology, the genetic aspects of retinal disorders, medically unexplained visual loss and acquired retinal diseases including autoimmune retinal disease. Case studies from Singapore and Malaysia were presented and discussed with the audience and Professor Holder. The feedbacks from attendees were positive, and all participants benefited from the overview lectures and comments on case discussions from Professor Holder. We look forward to similar interactive seminars on electrophysiology to be conducted in the future.