## **WELCOME MESSAGE**



Dear Colleagues and Friends,

Welcome to our 29<sup>th</sup> Annual Scientific Meeting of the Hong Kong Neurosurgical Society. Our theme this year is "Neuromodulation & Brain Computer Interface".

We are glad to have our good friend and eminent guest joining our meeting in person. Takaomi Taira, Professor at Tokyo Women's Medical University, Past President of the World Society for Stereotactic and Functional Neurosurgery and Japan Society for Stereotactic and Functional Neurosurgery will share with us his experience in using focused ultrasound in movement disorders in a sponsored lecture.

It is our great honour to have Edward Chang, Professor of Neurological Surgery at University of California San Francisco Weill Institute for Neurosciences, USA to elucidate how he decodes and synthesizes speech in human. Kai Miller, Associate Professor of Neurosurgery at Mayo Clinic will share his vast experience in the use of Brain Computer Interface in patients with motor deficits.

When we talk about deep brain stimulation (DBS), Parkinson's disease and other movement disorders always come to people's mind. Chang Jin Woo, Department of Neurosurgery, Yonsei University College of Medicine, Seoul, Past President of the World Society for Stereotactic and Functional Neurosurgery and Korean Neurosurgical Society, will enlighten us in the expedition of the new horizon of DBS for various psychiatric conditions.

Nowadays, there are various developments in neuromodulation which are pertaining to our neurosurgical patients. Our renowned guest speaker, Raymond Onders, Director, Adult Minimally Invasive Surgery, University Hospitals Cleveland Medical Centre, USA, was the surgeon who helped the paralyzed "Superman" star Christopher Reeve to breathe without a ventilator using diaphragmatic pacing stimulation system. Gabriel Wong, an ENT surgeon from New Jersey, USA will explain the use of hypoglossal nerve stimulation for moderate and severe obstructive sleep apnoea patients who cannot tolerate CPAP therapy.

Furthermore, local collaboration with neuroscientists and engineers is crucial if we wish to go an extra mile in advancing neuromodulation and brain computer interface in Hong Kong. There will be a round table discussion on how we can cooperate further with Professors Raymond Tong (CUHK), Thomas Choi (PolyU), and Leanne Chan (CityU).

Finally, I would like to take this opportunity to thank Dr. Calvin Mak and the organizing committee, the Secretariat, all helpers, the commercial sponsors, and all of you who participated. I hope you would find the meeting interesting and useful to your practice. I hope we can welcome all our guest speakers in person here in Hong Kong next time.



Dr. Michael Lee

President
The Hong Kong Neurosurgical Society

## **WELCOME MESSAGE**



Dear Members and Friends,

It is my honor to announce the commencement of our 29th Annual Scientific Meeting of the Hong Kong Neurosurgical Society. The theme of the ASM this year is fascinating – connecting the brain with machines, a dream come true by neurosurgeons to improve the neurological functions of patients. This exciting technology may sound distant to some of us, yet the research and clinical application of brain-computer interface, as well as neuromodulation, has gathered much pace in recent years.

We have invited an unprecedentedly high number of world experts to share with us a variety of topics. Prof. Edward Chang and Prof. Kai Miller will enlighten us on the current state-of-the-art development in the brain-computer interface. Three local experts in Engineering including Prof. Raymond Tong (CUHK), Prof. Thomas Choi (PolyU) and Prof. Leanne Chan (CityU), will join us in person to share their innovation in BCI and clinical applications in Hong Kong. Prof. Jin Woo Chang is going to share with us his experience with how Deep Brain Stimulation can benefit patients with psychiatric conditions. Neurosurgeons always treasure friendship and collaboration with other specialties. Prof. Raymond Onders and Prof. Gabriel Wong will shed light on how neuromodulation helps in diaphragmatic stimulation and hypoglossal nerve stimulation. We are also delighted to have Prof. Alok Sharan and Dr. Nader Hejrati to share in the Spine Chapter session. This year, we also have two sponsored lectures, in which Prof. John Thundyil will speak about the application of biomarkers in traumatic brain injury, and, last but not least, Prof. Takaomi Taira is joining us in person in Hong Kong to talk about MRgFUS.

I would like to express my sincere thanks to Dr. Michael Lee for his leadership, all speakers, the Organizing Committee, the IT Subcommittee, the Secretariat, commercial sponsors, and all of you who are participating both online and in person.

On. Colvin MAK
Honorary Secretary