



Ong Poo Lee

Consultant, Rehabilitation Medicine, TTSH

Research Interests:

- Amputee Rehabilitation
- Trauma Rehabilitation
- Robotics and Assistive technology in rehabilitation

Email: poolee_ong@ttsh.com.sg

Biography

Dr Ong Poo Lee received his post graduate medical degree (MRCP UK) in year 2016 and accredited as Rehabilitation Medicine Specialist in 2020 after 6 years of residency training in Singapore.

He works as Consultant in department of rehabilitation medicine at Tan Tock Seng Hospital with special interest in trauma rehabilitation, musculoskeletal rehabilitation and amputee rehabilitation. He believes that rehabilitation is one the most essential life changing intervention for people who survived from devastating illness. He is passionate in developing and using technology in the field of rehabilitation to help people with disabilities. For example, using wearable sensors, assistive technology or robotic technology to aid in the current rehabilitation system or innovate a new rehab model.

His research interest includes robotic rehabilitation, 3D printing design for amputee, wearable sensors, as well as telerehabilitation. He aims to work towards using data science, and artificial intelligent to create an accurate analysis of rehabilitation monitoring and prediction of functional outcome in people suffered from acute illness. He hopes to create an innovative rehabilitation model and technology that provide seamless rehabilitation service from hospital to home, with better quality of care and patient outcomes especially in vulnerable communities.

Selected Publications

- Tay MRJ, Soh YM, Plunkett TK, Ong PL, Huang W, Kong KH. **The Validity of the Montreal Cognitive Assessment for Moderate to Severe Traumatic Brain Injury Patients: A Pilot Study.** *Am J Phys Med Rehabil.* 2019; 98(11):971-975. doi: 10.1097/PHM.0000000000001227.
- Chen DE, Tay EK, Tan PL, Su P, Koh MM, Ong PL, Chew E, Ng YS. **The Impact of COVID-19 Pandemic on Rehabilitation in Singapore.** *Ann Acad Med Singap.* 2020; 49(11):925-927. doi: 10.47102/annals-acadmedsg.2020297.
- Tham SL, Ong PL, Lee AJY, Tay MRJ. **Rehabilitation of Patients with Platypnea-Orthodeoxia Syndrome in COVID-19 Pneumonia: Two Case Reports.** *J Rehabil Med Clin Commun.* 2020; 3:1000044. doi: 10.2340/20030711-1000044.
- Tay MRJ, Ong PL, Puah SH, Tham SL. **Acute Functional Outcomes in Critically Ill COVID-19 Patients.** *Front Med (Lausanne).* 2021; 7:615997. doi:10.3389/fmed.2020.615997.

- Ong PL, Tay MRJ, Tham SL. **Cost of Rehabilitation in Critically Ill COVID-19 Survivors: A Little Goes a Long Way.** *J Int Soc Phys Rehabil Med.* 2021; 4:104-6.

Notable Research Awards & Grants From Past 5 Years

Name of Awards & Grants	Year Obtained
RRIS Rehabilitation Research Grant (RRG4) for “Combining Wearable Inertial sensors and Pressure Mapping Insoles for Effective Gait Training in patient with Major Lower Limb Amputation”	2021
Medtech DIT for “Knee-based Locomotor Robotic Trainer: Optimising recovery and rehabilitation after total knee replacement surgery”	2021