



## Ong Poo Lee

Consultant

MD(UKM), MRCP(UK), MMED(Int Med)

Research Interests:

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

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### Biography

Dr. Ong, an accredited Rehabilitation Medicine Specialist since 2020, holds an MRCP (UK) degree earned in 2016. In 2022, he completed the CHI Fellowship Program, furthering his expertise in healthcare innovation. During his tenure at Tan Tock Seng Hospital, Dr. Ong focused on trauma, musculoskeletal, and amputee rehabilitation. He's a fervent advocate for technology in rehabilitation, utilizing wearables, assistive tech, and robotics to enhance patient care. Dr. Ong aspires to create an advanced rehabilitation model, seamlessly bridging hospital and home care, with a special emphasis on serving vulnerable communities. His work embodies a commitment to improving lives through rehabilitation and innovation.

### Selected Publications

- 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 Nov;49(11):925-927. doi: 10.47102/annals-acadmedsg.2020297. PMID: 33381791.
- 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 Nov;98(11):971-975. doi: 10.1097/PHM.0000000000001227. PMID: 31136306
- 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 Nov 20;3:1000044. doi: 10.2340/20030711-1000044. PMID: 33884145; PMCID: PMC8054748.

- Tay MRJ, **Ong PL**, Puah SH, Tham SL. Acute Functional Outcomes in Critically Ill COVID-19 Patients. *Front Med (Lausanne)*. 2021;7:615997. Published 2021 Jan 18. 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.
- Alhossary, A.; Ang, W.T.; Chua, K.S.G.; Tay, M.R.J.; Ong, P.L.; Murakami, T.; Quake, T.; Binedell, T.; Wee, S.K.; Phua, M.W.; et al. Identification of Secondary Biomechanical Abnormalities in the Lower Limb Joints after Chronic Transtibial Amputation: A Proof-of-Concept Study Using SPM1D Analysis. *Bioengineering* 2022, 9, 293. <https://doi.org/10.3390/bioengineering9070293>
- Ong, P.L.; Rosiana, A.; Chua, K.S.G. Characteristics and Functional Impact of Unplanned Acute Care Unit Readmissions during Inpatient Traumatic Brain Injury Rehabilitation: A Retrospective Cohort Study. *Life* 2023, 13, 1720. <https://doi.org/10.3390/life13081720>
- Ong, P.L.; Seah, J.D.; Chua, K.S.G. Inpatient Rehabilitation Outcomes after Primary Severe Haemorrhagic Stroke: A Retrospective Study Comparing Surgical versus Non-Surgical Management. *Life* 2023, 13, 1766. <https://doi.org/10.3390/life13081766>

### Notable Research Awards & Grants

Name of Awards & Grants	Year Obtained
Knee-based Locomotor Robotic Trainer: Optimising recovery and rehabilitation after total knee replacement surgery.	2021
CHI Innovation Fellowship Program	2022
NHG CMTi Clinician Innovator Preparatory Programme (CiPP) FY2022 Awardee	2022
Acceptance and Implementation of Tele-rehabilitation in the Community: A Feasibility Study	2023
Feasibility and effect of wearable sensor device (Rebee) in facilitating home-based exercise programs for amputee patients	-