

Abbreviated Curriculum Vitae

- **Name:** Chia Yew Woon
- **Title:** Associate Professor
- **Office Mailing Address:** 11 Jalan Tan Tock Seng, Singapore 308433
- **Email:** yew_oon_chia@ttsh.com.sg
- **Academic and/or Clinical Qualifications:**
 - Bachelor of Medicine and Bachelor of Surgery, National University of Singapore, 2002
 - Master of Medicine (Internal Medicine), National University of Singapore, 2007
 - Membership of the Royal Colleges of Physicians of the United Kingdom, The Federation of the Royal Colleges of Physicians of the United Kingdom, 2007
 - Master of Clinical Investigation, National University of Singapore, 2022
 - Fellowship of the Academy of Medicine, Singapore (Cardiology), Academy of Medicine, Singapore, 2012
 - European Diploma in Intensive Care Medicine, European Society of Intensive Care Medicine, 2013
 - Fellowship of the Royal College of Physicians of Edinburgh, Royal College of Physicians of Edinburgh, 2014
 - Diplomate in Adult Transthoracic Plus Transesophageal Echocardiography, National Board of Echocardiography, 2015
 - Fellowship of the Academy of Medicine, Singapore (Intensive Care Medicine), Academy of Medicine, Singapore, 2015
 - Diploma of Diagnostic Ultrasound (Critical Care), Australasian Society for Ultrasound in Medicine, 2016
 - Fellowship of the American College of Cardiology, American College of Cardiology, 2022
- **Leadership Positions and Honorary Appointments:**
 - Senior Consultant Cardiologist & Intensivist, Tan Tock Seng Hospital
 - Head, Critical Care Cardiology Service, Tan Tock Seng Hospital
 - Director, Cardiac Intensive Care Unit, Tan Tock Seng Hospital
 - Director, Extracorporeal Membrane Oxygenation Service Support, Tan Tock Seng Hospital
 - Chair, Inhaled Nitric Oxide Therapy Service, Tan Tock Seng Hospital
 - Chair, Critical Care Ultrasound Credentialing Committee, Tan Tock Seng Hospital
 - Chair, National Targeted Temperature Management Workgroup, Ministry of Health
 - Member, National ECMO Standing Committee, Ministry of Health
 - Member, COVID-19 Related Mortality Review Committee, Ministry of Health
 - Member, COVID-19 Clinical Management Committee, Ministry of Health
 - Member, Intensive Care Medicine Subspecialty Training Committee, Ministry of Health
 - Member, Complaints Panel, Singapore Medical Council, Ministry of Health
 - Board Member, Chapter of Intensivists, Academy of Medicine, Singapore
 - Member, Faculty of Medical Experts, Academy of Medicine, Singapore
 - Vice-President, Society of Intensive Care Medicine (Singapore)
- **Personal Statement:**
 - To build a collaborative Cardiac Intensive Care Unit and contribute to the development of intensive care services in Singapore and the training of doctors, nurses, and allied health professionals in the provision of exceptional care to critically ill patients.
 - To set up Mechanical Circulatory Support and Critical Care Ultrasonography services and to formulate protocols in the Intensive Care Units to create a safer environment for patients and staff in a cost-effective way.
 - To improve the management of resuscitated cardiac patients in the Intensive Care Units to improve the number of neurologically intact survivors, coupled with rehabilitation to improve both their functional and cognitive recovery, and integrate them back to society.
 - To continue to be heavily involved in the mentoring of both undergraduate medical students and junior doctors to help them appreciate Internal Medicine, Cardiology, Intensive Care Medicine, and principles of clinical reasoning through active participation in patients' care and learn to optimise patients' management and outcomes through application of evidence-based practices while adopting a cost-conscious behaviour.

- **Research:**

My research interests are driven by my clinical practice as a Cardiologist and Intensivist. I devote my time to the care of critically ill patients in the Cardiac Intensive Care Unit (CICU) and the National Centre for Infectious Diseases (NCID) Outbreak ICU. I am the Singapore Principal Investigator for several international collaborative studies such as the TAME Cardiac Arrest Trial, TTM-2 Trial and STEPCARE Trial.

I have published 26 peer-reviewed manuscripts to date. Some of my publications include:

- Fan BE, Wong SW, Sum CLL, Lim GH, Leung BP, Tan CW, Ramanathan K, Dalan R, Cheung C, Lim XR, Sadasiv MS, Lye DC, Young BE, Yap ES, **Chia YW**; COVID-19 Clotting and Bleeding Investigators. Hypercoagulability, endotheliopathy, and inflammation approximating 1 year after recovery: Assessing the long-term outcomes in COVID-19 patients. *Am J Hematol*. 2022 Jul;97(7):915-923.
- Fan BE, Ramanathan K, Sum CLL, Christopher D, Chan SSW, Lim GH, Bok CF, Wong SW, Lye DC, Young BE, Lim JY, Lee RM, Lim SP, Tan HT, Ang MK, Lau SL, Kuperan P, Ong KH, **Chia YW**. Global haemostatic tests demonstrate the absence of parameters of hypercoagulability in non-hypoxic mild COVID-19 patients: a prospective matched study. *J Thromb Thrombolysis*. 2022 Apr;53(3):646-662.
- **Chia YW**, Chia MYC. Reducing the total ischaemic time in ST-segment elevation myocardial infarction: Every step matters. *Ann Acad Med Singap*. 2021 Sep;50(9):662-665.
- **Chia YW**, Lim SL, Loh JK, Leong BS, Ong MEH. Beyond return of spontaneous circulation: update on post-cardiac arrest management in the intensive care unit. *Singapore Med J*. 2021 Aug;62(8):444-451.
- Wong SW, Fan BE, Huang W, **Chia YW**. ST-segment elevation myocardial infarction in post-COVID-19 patients: A case series. *Ann Acad Med Singap*. 2021 May;50(5):425-430.
- Fan BE, Ng J, Chan SSW, Christopher D, Tso ACY, Ling LM, Young BE, Wong LJJ, Sum CLL, Tan HT, Ang MK, Lim GH, Ong KH, Kuperan P, **Chia YW**. COVID-19 associated coagulopathy in critically ill patients: A hypercoagulable state demonstrated by parameters of haemostasis and clot waveform analysis. *J Thromb Thrombolysis*. 2021 Apr;51(3):663-674.
- Wong SW, Ng J, **Chia YW**. Tuberculous pericarditis with tamponade diagnosed concomitantly with COVID-19: a case report. *Eur Heart J Case Rep*. 2020 Dec 28;5(1):ytaa491.
- Ng J, Fan BE, **Chia YW**. In Response to "Coagulopathy of Coronavirus Disease 2019". *Crit Care Med*. 2020 Nov;48(11):e1159-e1160.
- Ng S, **Chia YW**. A case report: use of cerebral oximetry in the early detection of cerebral hypoperfusion in a post-cardiac arrest patient during targeted temperature management. *Eur Heart J Case Rep*. 2019 Jul 22;3(3):ytz125
- Min Sen Yew, **Yew Woon Chia**. Dynamic Left Ventricular Outflow Tract Obstruction After Acute Anterior Myocardial Infarction. *Crit Care Med* 2014; 42(12):A1648-9

- **Contribution to Science:**

As a Cardiologist-Intensivist, I see immense importance in improving the survival and neurological outcomes of patients after resuscitated cardiac arrest, which is a major public health problem in Singapore. Locally, while 19% of out-of-hospital cardiac arrest patients survive to hospital admission, only 6% survive to hospital discharge and only 4% survive with a good neurological outcome. I had investigated the novel use of cerebral oximetry (which are usually used during elective cardiac surgeries in the operating theatres) in providing an "additional window" in the ICU management of post-cardiac arrest patients. We performed a retrospective cohort study, demonstrating that survivors to hospital discharge had a higher cerebral oximetry reading of 59.5% vs 49.7% in non-survivors ($p = 0.0005$). There are plans to follow-up with a randomised controlled trial to determine if steps taken to target a higher cerebral oximetry reading will lead to better clinical outcomes. As Chair of the Ministry of Health National Targeted Temperature Management Workgroup, I also led the publication of our local guidelines on the ICU management of post-cardiac arrest patients.