

## Lim Choon Guan

Senior Consultant Psychiatrist and Deputy Chief, Department of Developmental Psychiatry, IMH Adjunct Asst Prof, Duke-NUS and NTU

**Research Interests:** 

Child Mental Health, ADHD

Email: choon guan lim@imh.com.sg

## Biography

Dr Lim Choon Guan is a senior consultant psychiatrist and deputy chief of the Department of Developmental Psychiatry at the Institute of Mental Health (IMH). He obtained his Master in Medicine (Psychiatry) in 2005 and completed his advanced specialist training in 2008. He completed a fellowship with the ADHD Clinic, Neuropsychiatry Team at the Department of Psychiatry at the Hospital for Sick Children 2 years later, under the Ministry of Health's Human Manpower Development Programme. He works with the Neuro-Behavioural Clinic at the Child Guidance Clinic which oversees the clinical care for children with neuro-behavioural disorders such as ADHD and autistic spectrum disorder. In addition to clinical services, Dr Lim is also involved in teaching and clinical research, especially involving children with ADHD. He is an adjunct assistant professor with the Duke-National University of Singapore (NUS) Graduate Medical School and the National Technological University, and a Senior Clinical Tutor at the NUS Yong Loo Lin School of Medicine. He is also a member of the National Healthcare Group and the hospital's institutional review boards, and a senior editor with the peer-reviewed open-access journal 'Child and Adolescent Psychiatry and Mental Health'.

## **Selected Publications**

- Lim CG, Lee TS, Guan C, Sheng Fung DS, Cheung YB, Teng SS, Zhang H, Krishnan KR. Effectiveness of a Brain-Computer Interface Based Programme for the Treatment of ADHD: A Pilot Study. *Psychopharmacol Bull*. 2010; 43(1):73-82.
- Charach A, Dashti B, Carson P, Booker L, Lim CG, Lillie E, Yeung E, Ma J, Raina P, Schachar R. Attention Deficit Hyperactivity Disorder: Effectiveness of Treatment in At-Risk Preschoolers; Long-Term Effectiveness in All Ages; and Variability in Prevalence, Diagnosis, and Treatment. Comparative Effectiveness Review No. 44. (Prepared by the McMaster University Evidence-based Practice Center under Contract No. MME2202 290-02-0020.) AHRQ Publication No. 12-EHC003-EF. *Rockville (MD): Agency for Healthcare Research and Quality (US)*. 2011. Available at www.effectivehealthcare.ahrq.gov/reports/final.cfm.
- Lim CG, Lee TS, Guan C, Fung DS, Zhao Y, Teng SS, Zhang H, Krishnan KR. A brain-computer interface based attention training program for treating attention deficit hyperactivity disorder. *PLoS One*. 2012; 7(10):e46692. doi: 10.1371/journal.pone.0046692.
- Charach A, Carson P, Fox S, Muhammad UA, Beckett J, Lim CG. Interventions for Preschool Children at High Risk for ADHD: A Comparative Effectiveness Review. *Pediatrics*. 2013; 131(5):e1584-604. doi: 10.1542/peds.2012-0974.

- Lim CG, Ong SH, Chin CH, Fung DS. Child and adolescent psychiatry services in Singapore. Child Adolesc Psychiatry Ment Health. 2015; 9:7.
- Lim CG, Loh H, Renjan V, Tan J, Fung D. Child Community Mental Health Services in Asia Pacific and Singapore's REACH Model. *Brain Sci.* 2017; 7(10):126. doi: 10.3390/brainsci7100126.
- Qian X, Loo BRY, Castellanos FX, Liu S Koh HL, Poh XWW, Krishnan R, Fung D, Chee MWL, Guan CT, Lee TS, Lim CG, Zhou J. Brain-computer-interface-based intervention re-normalizes brain functional network topology in children with attention deficit/hyperactivity disorder. *Translational psychiatry*. 2018; 8(149):1-11.
- Lim CG, Poh XWW, Fung SSD, Guan C, Bautisa D, Cheung YB, Zhang HH, Yeo SN, Krishnan R, Lee TS. A randomized controlled trial of a brain-computer interface based attention training program for ADHD. *PLoS ONE*. 2019; 14(5): e0216225. doi: 10.1371/journal.pone.0216225.
- Lim CG, Lim-Ashworth SJN, Fung DSS. Updates in technology-based interventions for ADHD. Current Opinion in Psychiatry. 2020.

## **Translating Research Into Healthcare**

- Singapore researchers and local tech startup launch pilot to help children with ADHD using BCI tech. *MobiHealthNews*.
   Published 14 November 2019. <u>https://www.mobihealthnews.com/news/asia-pacific/singapore-researchers-and-local-tech-startup-launch-pilot-help-children-adhd-using \
  </u>
- Child's play: Researchers develop game to help children with ADHD. *Channel News Asia*. Published 21 November 2019. <u>https://www.channelnewsasia.com/news/singapore/adhd-children-game-play-attention-span-12107600</u>