



**Dr. Chook Jack Bee**

Bachelor of Biomedical Sciences (Hons), Master of Medical Science, Doctor of Philosophy (Medicine) in University of Malaya

Position:  
Research Fellow

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I graduated from Bachelor of Biomedical Sciences (Hons) in 2001 in University Malaya, continue pursuing Master of Medical Science and Doctor of Philosophy in the same university. My master project was on 'Development of Hepatitis B Virus Genotyping Method and its Correlation with Disease Profile' and my PhD study was on 'Influence of Viral and Host Characteristics on Clinical Outcome of Hepatitis B'. I continued on hepatitis B project when I was post-doctoral research fellow, focusing on natural treatment of hepatitis B and mutational analysis of hepatitis B virus. At the same time, I expand my field on HIV and respiratory viruses. I have involved actively in the assay development for quantitative and qualitative PCR assay for HBV, HIV and respiratory viruses and have patented those assay. In addition, I have involved in software development (AlignMerger) with one patent pending.

**Research Interests:**

- Mutational analysis and virological profiling of hepatitis B virus-associated disease outcome
- Molecular epidemiology of respiratory viruses
- Molecular evolution of HIV
- Real-time absolute quantification of viruses
- Comparative genomic analysis of viruses
- Mathematical modelling of infectious diseases
- Molecular software development
- Statistical analysis and data interpretation

**Selected Publications:**

1. Oong XY, Ng KT, Takebe Y, Ng LJ, Chan KG, Chook JB, Kamarulzaman A, Tee KK (2017). Identification and evolutionary dynamics of two novel human coronavirus OC43 genotypes associated with acute respiratory infections: phylogenetic, spatiotemporal and transmission network analyses. *Emerg Microbes Infect.* 6(1):e3. doi: 10.1038/emi.2016.132. [ISI-cited publication] [IF: 1.774; Q1]
2. Ng KT, Chook JB, Oong XY, Chan YF, Chan KG, Hanafi NS, Pang YK, Kamarulzaman A, Tee KK (2016). Performance of a Taqman Assay for Improved Detection and Quantification of Human Rhinovirus Viral Load. *Sci Rep.* 6:34855. doi: 10.1038/srep34855. [ISI-cited publication] [IF: 2.073; Q1]
3. Al-Khannaq MN, Ng KT, Oong XY, Pang YK, Takebe Y, Chook JB, Hanafi NS, Kamarulzaman A, Tee KK (2016). Diversity and Evolutionary Histories of Human Coronaviruses NL63 and 229E

- Associated with Acute Upper Respiratory Tract Symptoms in Kuala Lumpur, Malaysia. *Am J Trop Med Hyg.* 94(5):1058-64. doi: 10.4269/ajtmh.15-0810. [ISI-cited publication] [IF: 1.488; Q1]
4. Al-Khannaq MN, Ng KT, Oong XY, Pang YK, Takebe Y, Chook JB, Hanafi NS, Kamarulzaman A, Tee KK (2016). Molecular epidemiology and evolutionary histories of human coronavirus OC43 and HKU1 among patients with upper respiratory tract infections in Kuala Lumpur, Malaysia. *Virology* 13(1):33. doi: 10.1186/s12985-016-0488-4. [ISI-cited publication] [IF: 1.166; Q2]
  5. Ng KT, Takebe Y, Chook JB, Chow WZ, Chan KG, Abed Al-Darraji HA, Kamarulzaman A, Tee KK (2015). Co-infections and transmission networks of HCV, HIV-1 and HPgV among people who inject drugs. *Sci Rep.* 5:15198. doi: 10.1038/srep15198. [ISI-cited publication] [IF: 2.073; Q1]
  6. Cheong HT, Chow WZ, Takebe Y, Chook JB, Chan KG, Al-Darraji HA, Koh C, Kamarulzaman A, Tee KK (2015). Genetic characterization of a novel HIV-1 circulating recombinant form (CRF74\_01B) identified among intravenous drug users in Malaysia: Recombination history and phylogenetic linkage with previously defined recombinant lineages. *PLoS One.* 10(7):e0133883. [ISI-cited publication] [IF: 1.395; Q1]
  7. Chook JB, Teo WL, Ngeow YF, Tee KK, Ng KP, Rosmawati M (2015). Universal primers for detection and sequencing of HBV genomes across genotypes A-G. *J Clin Microbiol* 53(6):1831-1835. [ISI-cited publication] [IF: 2.151; Q1]
  8. Chook JB, Ong LY, Takebe Y, Chan KG, Choo M, Kamarulzaman A, Tee KK (2015). Molecular detection of HIV-1 subtype B, CRF01\_AE, CRF33\_01B and newly emerging recombinant lineages in Malaysia. *Am J Trop Med Hyg.* 92(3):507-512. [ISI-cited publication] [IF: 1.488; Q1]
  9. Cheong HT, Ng KT, Ong LY, Chook JB, Chan KG, Takebe Y, Kamarulzaman A, Tee KK (2014). Cross-border sexual transmission of the newly emerging HIV-1 clade CRF51\_01B. *PLoS One.* 9(10):e111236. [ISI-cited publication] [IF: 1.395; Q1]
  10. Chook JB, Ngeow YF, Ng KP, Tiang YP, Mohamed R (2013). Comparative analysis of viral genomes from acute and chronic hepatitis B reveals novel variants associated with lower rate of chronicity. *J Med Virol.* 85:419-424. [ISI-cited publication] [IF: 1.015; Q2]
  11. Chook JB, Ngeow YF, Yap SF, Tan TC, Mohamed R (2011). Combined use of wild-type HBV precore and high serum iron marker as a potential tool for the prediction of liver cirrhosis in chronic hepatitis B infection. *J Med Virol.* 83:594-601. [ISI-cited publication] [IF: 1.015; Q2]
  12. Chook JB, Mohamed R, Ngeow YF, Tan TC, Yap SF, Hepatitis B Group (2011). Novel combination biomarker in hepatitis B-related cirrhosis. *Hepatology* 5:3-558. (APASL Poster Abstract) [ISI-cited publication] [IF: 0.669; Q3]