



Dr. Gilman Kit Hang SIU
PhD, ASCPⁱ (MB), MSB
Limin Endowed Young Scholar in Medical Laboratory Science



 [0000-0002-4354-3393](https://orcid.org/0000-0002-4354-3393)
 [35485473100](https://scopus.com/authid/detail.url?authorID=35485473100)

Dr. Gilman SIU, Associate Professor of Department of Health Technology and Informatics, PolyU, was trained as a medical laboratory technologist during his undergraduate study in PolyU (BSc in Biomedical Science with 1st class honor) and obtained his PhD degree in HKU Microbiology in 2011. Dr. SIU has been working on microbial genomics for over 15 years. His major research areas include (i) advanced molecular testing for rapid diagnosis of infectious diseases, (ii) genetic mechanisms of antimicrobial resistance and virulence in highly infectious bacteria and viruses, such as *Mycobacterium tuberculosis* and HIV, and (iii) molecular epidemiology of emerging infectious agents, such as SARS-CoV-2.

He published over 45 peer-reviewed research articles related to emerging infectious diseases in high-impact journals, such as *Lancet Respiratory Medicine* and *Clinical Chemistry*. In the past two years, he has received the Faculty research and teaching award (individual) from PolyU based on his outstanding performance in both research and teaching activities. The total amount of competitive external grants (in the capacity of PI) has been over HK\$40M in recent five years. Dr. SIU is also appointed as member of Medical Laboratory Technologist Board and as the Chairman of Examination and Education committee of the Board.

The rapid sequencing technique developed by Dr. SIU has played an important role in identifying and stopping transmission chains of COVID-19 in Hong Kong. His work has provided scientific support for the Government's anti-pandemic measures. PolyU recently named Dr. Siu as "Limin Endowed Young Scholar in Medical Laboratory Science" for his contribution to society through research excellence.

醫療科技及資訊學系副教授蕭傑恒博士於理大醫療化驗科學一級榮譽畢業，並於 2011 年在港大獲得微生物學博士學位。蕭博士從事微生物基因組學研究已超過 15 年。他的研究領域包括 (i) 快速診斷傳染病的分子檢測技術，(ii) 結核菌和愛滋病毒的抗藥性及毒性機制，以及 (iii) 新興病原體(如新冠病毒) 的分子流行病學。

他在《*Lancet Respiratory Medicine*》和《*Clinical Chemistry*》等高影響力的醫學期刊上發表了超過 45 篇研究文章。過去兩年，他憑藉在科研和教學的出色表現，獲理大頒發研究和教學獎。近五年他以首席研究員身份獲得的研究資助總額超過 4000 萬港元。他亦獲政府委任為醫學化驗師委員會成員及考試和教育委員會主席。

蕭博士開發的快速測序技術在識別和阻止新冠病毒傳播鏈方面發揮了重要作用。他的工作為政府的防疫措施提供了科學支持。理大最近授予蕭博士為“利民 (醫療化驗科學) 青年學者”，以表彰他通過卓越的研究對社會做出的貢獻。

QUALIFICATIONS AND PROFESSIONAL TRAINING

Education

2007-2010	PhD (Microbiology)	The University of Hong Kong
2004-2006	BSc in Biomedical Science (1 st class Hon)	The Hong Kong Polytechnic University

Professional Training

2016	Fellow member, Hong Kong Society for Molecular Diagnostic Science (Hong Kong)
2016	Fellow member, Hong Kong Institute of Medical Laboratory Science (Hong Kong)
2012	Registered Medical Laboratory Technologist (Part I) (Hong Kong)
2012	International Technologists in Molecular Biology, ASCP (US)
2012	Member, ASCP (US)
2012	Member, Society of Biology (UK)
2004	Registered Medical Laboratory Technologist (Part II) (Hong Kong)

Positions and Employment

2019-now	Associate Professor	Dept of Health Technology and Informatics, The Hong Kong Polytechnic University
2013-2019	Assistant Professor	Dept of Health Technology and Informatics, The Hong Kong Polytechnic University
2012-2013	Research Officer	Dept of Microbiology, The University of Hong Kong
2011-2012	Scientific Officer (Medical)	Chan and Hou Medical Laboratories Ltd.
2010-2011	Post-doctoral Fellow	Dept of Microbiology, The University of Hong Kong

AWARDS

Research

2021	Limin Endowed Young Scholar in Medical Laboratory Science
2018	Faculty Award for Outstanding Performance/Achievement in Research & Scholarly Activities, The Hong Kong Polytechnic University, Hong Kong
2009	European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) Travel Grant
2008	Keystone Symposium Scholarship

Teaching

2020	Faculty Award for Outstanding Performance/Achievement in Teaching, The Hong Kong Polytechnic University, Hong Kong 2019/20
2019	HTI Departmental Teaching Award 2018/19

RESEARCH

Research Interests

- Genetic mechanisms of antimicrobial resistance and virulence in highly infectious agents
- Advanced molecular testing for rapid diagnosis of infectious diseases
- Molecular epidemiology of emerging infectious agents
- Microbial metagenomics

Funded External Competitive Grants (In capacity of Principle Investigator)

2020	General Research Fund (GRF) Unveiling the pathogenic mechanisms of tuberculous meningitis caused by hypervirulent <i>Mycobacterium tuberculosis</i> strains using multi-omic analysis coupled with a multiple fluorescent zebrafish infection model	HK\$1,195,542
2020	HMRF Commissioned Study Genome sequencing of COVID-19 cases in Hong Kong: Development of a geo-phylogenetic database and characterisation of SARS-CoV-2 variants circulating in the community	HK\$2,998,100
2020	ITF-PSTS Development of nanopore sequencing-based platform for rapid monitoring of COVID-19 transmission in Hong Kong	HK\$1,800,000
2020	ITF-PRP Portable nanopore sequencing-based assay for rapid diagnosis of bloodstream infection	HK\$1,500,000
2018	General Research Fund (GRF) Combined genomic and transcriptomic approach to elucidate the mechanism underlying enhanced intramacrophage survivability of hypervirulent <i>Mycobacterium tuberculosis</i>	HK\$931,824
2018	Innovation and Technology Fund (ITF) Tier3 Portable nanopore sequencing for rapid diagnosis of drug resistant tuberculosis	HK\$1,399,985
2018	AIDS Trust Fund Real-time, portable nanopore-type sequencing for rapid HIV genotyping and drug resistance monitoring	HK\$948,432
2017	AIDS Trust Fund Development of Low-Cost Genotyping Assay for Routine Clinical Detection of HIV-1 Integrase Inhibitor Resistance	HK\$495,270
2017	Health and Medical Research Fund (HMRF) Rapid and Comprehensive Prediction of First and Second-Line Drug Resistance in <i>Mycobacterium Tuberculosis</i> Directly from Respiratory Specimens Using Massive Parallel Targeted Sequencing: A Prospective Study	HK\$806,535
2017	AIDS Trust Fund Prediction of Incident Active TB in PLHIV by Detection of Free-Circulating <i>M. tuberculosis</i> DNA in patient plasma: A Retrospective Longitudinal Study	HK\$479,350

Publications

I. Peer-Refereed Journal Articles

1. Cheng VCC, **Siu GKH (Co-first author)**, Wong SC, Au AKW, Ng CSF, Chen H, Xin L, Lee LK, Leung JSL, Lu KK, Lo HWH, Wong EYK, Luk S, Lam BHS, To WK, Lee RA, Lung DC, Kwan MYW, Tse H, Chuang SK, To KKW, Yuen KY. Complementation of contact tracing by mass testing for successful containment of beta COVID-19 variant (SARS-CoV-2 VOC B.1.351) epidemic in Hong Kong. *Lancet Reg Health West Pac*. 2021 (in press)
2. Wong RCW, Lee MK, **Siu GK**, Lee LK, Leung JSL, Leung ECM, Ho YLL, Lai RWM. Healthcare workers acquired COVID-19 disease from patients? An investigation by phylogenomics. *J Hosp Infect*. 2021;S0195-6701(21) (IF 2020: 3.271)
3. Cheng VCC, Fung KSC, **Siu GKH (Co-first author)**, Wong SC, Cheng LSK, Wong MS, Lee LK, Chan WM, Chau KY, Leung JSL, Chu AWH, Chan WS, Lu KK, Tam KKG, Ip JD, Leung KSS, Lung DC, Tse H, To KKW, Yuen KY. Nosocomial outbreak of COVID-19 by possible airborne transmission leading to a superspreading event. *Clin Infect Dis*. 2021 (In press) (IF 2020= 8.31)
4. Teng JLL, Luo R, Tang BSF, Fong JYH, Wang L, Jia L, Wong CKS, Chan E, Leung AWS, **Siu GKH**, Chiu TH, Fung AMY, Wu AKL, Yeung ML, Lau SKP, Woo PCY. High Prevalence and Mechanism Associated With Extended Spectrum Beta-Lactamase-Positive Phenotype in *Laribacter hongkongensis*. *Front Microbiol*. 2021; 9;12:618894.
5. Lu L, Chu AWH, Zhang RR, Chan WM, Ip JD, Tsoi HW, Chen LI, Cai JP, Lung DC, Tam AR, Yau YS, Kwan MYW, To WK, Tsang OTY, Lee LLY, Yi H, Ip TC, Poon RWS, **Siu GKH**, Mok BWY, Cheng VCC, Chan KH, Yuen KY, Hung IFN, To KKW. The impact of spike N501Y mutation on neutralizing activity and RBD binding of SARS-CoV-2 convalescent serum. *EBioMedicine*. 2021 (In press)
6. **Siu GK (First and corresponding author)**, Lee LK, Leung KS, Leung JS, Ng TT, Chan CT, Tam KK, Lao HY, Wu AK, Yau MC, Lai YW, Fung KS, Chau SK, Wong BK, To WK, Luk K, Ho AY, Que TL, Yip KT, Yam WC, Shum DH, Yip SP. Will a new clade of SARS-CoV-2 imported into the community spark a fourth wave of the COVID-19 outbreak in Hong Kong? *Emerg Microbes Infect*. 2020;9(1):2497-2500. (IF 2020= 5.828)
7. Leung KSS, Ng TTL, Wu AKL, Yau MCY, Lao HY, Choi MP, Tam KKG, Lee LK, Wong BKC, Ho AYM, Yip KT, Lung KC, Liu RWT, Tso EYK, Leung WS, Chan MC, Ng YY, Sin KM, Fung KSC, Chau SKY, To WK, Que TL, Shum DHK, Yip SP, Yam WC, **Siu GK (Corresponding author)**. A Territorywide Study of Early Coronavirus Disease Outbreak, Hong Kong, China. *Emerg Infect Dis*. 2021;27(1):196-204. (IF 2020= 6.883)
8. Tafess K, Beyen TK, Girma S, Girma A, **Siu G (Last author)**. Spatial clustering and genetic diversity of *Mycobacterium tuberculosis* isolate among pulmonary tuberculosis suspected patients, Arsi Zone, Ethiopia. *BMC Pulm Med*. 2021;21(1):206 (IF 2020= 2.813)
9. Tafess K, Ng TT, Lao HY, Leung KS, Tam KK, Rajwani R, Tam ST, Ho LP, Chu CM, Gonzalez D, Sayada C, Ma OC, Belete HN, Ameni G, Yam WC, **Siu GK (Corresponding author)**. Targeted Sequencing Workflows for Comprehensive Drug Resistance Profiling of *Mycobacterium tuberculosis* cultures using Illumina MiSeq and Nanopore MinION: Comparison of analytical and diagnostic performance, turnaround time and cost. *Clin Chem*. 2020;66(6):809-820. (IF 2018 = 8.636)

10. Shenkutie AM, Yao MZ, **Siu GK**, Wong BKC, Leung PH. Biofilm-Induced Antibiotic Resistance in Clinical *Acinetobacter baumannii* Isolates. *Antibiotics (Basel)*. 2020;9(11):817.
11. Yip CC, Chan WM, Ip JD, Seng CW, Leung KH, Poon RW, Ng AC, Wu WL, Zhao H, Chan KH, **Siu GK**, Ng TT, Cheng VC, Kok KH, Yuen KY, To KK. Nanopore Sequencing Reveals Novel Targets for Detection and Surveillance of Human and Avian Influenza A Viruses. *J Clin Microbiol*. 2020;58(5).
12. Suen LKP, Lung VYT, Boost MV, Au-Yeung CH, **Siu GKH**. Microbiological evaluation of different hand drying methods for removing bacteria from washed hands. *Sci Rep*. 2019. 24;9(1):13754.
13. Tam KK, Leung KS, **Siu GK**, Chang KC, Wong SS, Ho PL, Leung EK, Yam WC. Direct detection of pyrazinamide resistance of *Mycobacterium tuberculosis* using *pncA* PCR Sequencing. *J Clin Microbiol*. 2019. 26;57(8). (IF 2018: 4.05)
14. Leung KS, To SW, Chen JH, **Siu GK**, Chan KC, Yam WC. Molecular characterization of HIV-1 minority subtypes in Hong Kong: A recent epidemic of CRF07_BC among the men who have sex with men population. *Curr HIV Res*. 2019;17(1):53-64. (IF 2018: 0.89).
15. Suen LKP, **Siu GKH**, Guo YP, Yeung SKW, Lo KYK, O'Donoghue M. The public washroom - friend or foe? An observational study of washroom cleanliness combined with microbiological investigation of hand hygiene facilities. *Antimicrob Resist Infect Control*. 2019 ;8:47. (IF 2018: 3.57)
16. Leung KS, **Siu GK**, Tam KK, Ho PL, Wong SS, Leung EK, Yu SH, Ma OC, Yam WC. Diagnostic Evaluation of An In-House Developed Single-tube, Duplex, Nested IS6110 Real-Time PCR assay for Rapid Pulmonary Tuberculosis Diagnosis. *Tuberculosis (Edinb)*. 2018;112:120-125. (IF 2018: 2.73)
17. Rajwani R, Shehzad S, **Siu GKH (Corresponding author)**. MIRU-profiler: a rapid tool for determination of 24-loci MIRU-VNTR profiles from assembled genomes of *Mycobacterium tuberculosis*. *PeerJ*. 2018; 6:e5090. (IF 2018: 2.35)
18. Lee AWT, Lam JKS, Lam RKW, Ng WH, Lee ENL, Lee VTY, Sze PP, Rajwani R, Fung KSC, To WK, Lee RA, Tsang DNC, **Siu GKH (Corresponding author)**. Comprehensive evaluation of the MBT STAR-BL module for simultaneous bacterial identification and β -lactamase-mediated resistance detection in Gram-negative rods from cultured isolates and positive blood cultures. *Front Microbiol*. 2018;9:334. (IF 2018: 3.816)
19. Tafess K, Beyen TK, Abera A, Tasew G, Mekit S, Sisay S, Tadesse L, **Siu GKH (Corresponding author)**. Treatment Outcomes of Tuberculosis at Asella Teaching Hospital, Ethiopia: Ten Years' Retrospective Aggregated Data. *Front Med (Lausanne)*. 2018; 5:38. (IF 2018: 3.113)
20. Rajwani R, Yam WC, Zhang Y, Kang Y, Wong BKC, Leung KSS, Tam KKG, Tulu KT, Zhu L, **Siu GKH (Corresponding Author)**. Comparative Whole-Genomic Analysis of an Ancient L2 Lineage *Mycobacterium tuberculosis* Reveals a Novel Phylogenetic Clade and Common Genetic Determinants of Hypervirulent Strains. *Front Cell Infect Microbiol*. 2018 ;7:539. (IF 2016: 4.300)
21. Leung KS, **Siu GK**, Tam KK, To SW, Rajwani R, Ho PL, Wong SS, Zhao WW, Ma OC, Yam WC. Comparative Genomic Analysis of Two Clonally Related Multidrug Resistant *Mycobacterium*

tuberculosis by Single Molecule Real Time Sequencing. **Front Cell Infect Microbiol.** 2017;7:478. (IF 2016: 4.300)

22. Tam KK, Leung KS, To SW, **Siu GK**, Lau TC, Shek VC, Tse CW, Wong SS, Ho PL, Yam WC. Direct detection of *Mycobacterium tuberculosis* and drug resistance in respiratory specimen using Abbott Realtime MTB detection and RIF/INH resistance assay. **Diagn Microbiol Infect Dis.** 2017;89(2):118-124. (IF 2016: 2.401)
23. Dheda K, Gumbo T, Maartens G, Dooley KE, McNerney R, Murray M, Furin J, Nardell EA, London L, Lessem E, Theron G, van Helden P, Niemann S, Merker M, Dowdy D, Van Rie A, **Siu GK**, Pasipanodya JG, Rodrigues C, Clark TG, Sirgel FA, Esmail A, Lin HH, Atre SR, Schaaf HS, Chang KC, Lange C, Nahid P, Udwadia ZF, Horsburgh CR Jr, Churchyard GJ, Menzies D, Hesselning AC, Nuermberger E, McIlleron H, Fennelly KP, Goemaere E, Jaramillo E, Low M, Jara CM, Padayatchi N, Warren RM. The epidemiology, pathogenesis, transmission, diagnosis, and management of multidrug-resistant, extensively drug-resistant, and incurable tuberculosis. **Lancet Respir Med.** 2017; pii: S2213-2600(17)30079-6 (IF 2018: 21.466)
24. Yuan L, Yu Y, Zhu Y, Li Y, Li C, Li R, Ma Q, **Siu GK**, Yu J, Jiang T, Xiao J, Kang Y. GAAP: Genome-organization-framework-Assisted Assembly Pipeline for prokaryotic genomes. **BMC Genomics.** 2017 ; 18(Suppl 1):952. (IF 2016: 3.729)
25. To SWC, **Siu GKH**, Wong KH, Chan KC, Yuen KT, Ng HM & Yam WC. Utilization of a duplex hybrid probe real-time PCR to detect and estimate IL-28B polymorphisms prevalence among HIV/HCV co-infected patients in Hong Kong. **J Med Microb Diagn.** 2015; 4:194 (IF 2016: 0.490)
26. **Siu GK (First author)**, Chen JH, Ng TK, Lee RA, Fung KS, To SW, Wong KC, Cheung S, Wong IW, Tam MM, Lee SS, Yam WC. Performance Evaluation of the Verigene Gram-Positive and Gram-Negative Blood Culture Test for Direct Identification of Bacteria and Their Resistance Determinants from Positive Blood Cultures in Hong Kong. **PLoS One.** 2015;10(10):e0139728. (IF 2018: 2.766)
27. Chen JH, She KK, Kwong TC, Wong OY, **Siu GK**, Leung CC, Chang KC, Tam CM, Ho PL, Cheng VC, Yuen KY, Yam WC. Performance of the new automated Abbott RealTime MTB assay for rapid detection of *Mycobacterium tuberculosis* complex in respiratory specimens. **Eur J Clin Microbiol Infect Dis.** 2015;34(9): 1827-32 (IF 2018: 2.537)
28. Luo Y, **Siu GK (Co-first author)**, Yeung AS, Chen JH, Ho PL, Leung KW, Tsang JL, Cheng VC, Guo L, Yang J, Ye L, Yam WC. Performance of the VITEK MS matrix-assisted laser desorption ionization-time of flight mass spectrometry system for rapid bacterial identification in two diagnostic centres in China. **J Med Microbiol.** 2015; 64(pt 1):18-24 (IF 2018: 2.112)
29. Lan Y, Lam JT, **Siu GK**, Yam WC, Manson AJ, Lam JK. Cationic amphipathic D-enantiomeric antimicrobial peptides with in vitro and ex vivo activity against drug-resistant *Mycobacterium tuberculosis*. **Tuberculosis (Edinb).** 2014; 94(6):678-89 (IF 2018: 2.73)
30. **Siu GK (First and Corresponding author)**, Yam WC, Zhang Y, Kao RY. An upstream truncation of furA-katG operon confer high-level isoniazid resistance in a *Mycobacterium tuberculosis* clinical isolate with no known resistance associated mutations. **Antimicrob Agents Chemother.** 2014; 58(10):6093-100 (IF 2018: 4.255)
31. Yam WC, **Siu GK**, Ho PL, Ng TK, Que TL, Yip EK, Fok CP, Chen JH, Cheng VC, Yuen KY. Evaluation of LightCycler[®] Methicillin-Resistant *Staphylococcus aureus* (MRSA) Advanced Test

for the detection of nasal colonizing MRSA. *J Clin Microbiol.* 2013; 51(9):2869-74 (IF 2018: 4.045)

32. Chen JH, Ho PL, Kwan GS, She KK, **Siu GK**, Cheng VC, Yuen KY, Yam WC Direct Bacterial Identification in Blood Cultures using two commercial MALDI-TOF mass spectrometry systems. *J Clin Microbiol.* 2013; 51(6):1733-9. 51(6):1733-9 (IF 2018: 4.045)
33. Rapid Identification of Mycobacteria and Rapid Detection of Drug Resistance in Mycobacterium tuberculosis in Cultured Isolates and in Respiratory Specimens. Yam WC, **Siu KH.** *Methods Mol Biol.* 2013; 943:171-99.(IF 2016: 1.290)
34. Vermeer LS, Lan Y, Abbate V, Ruh E, Bui TT, Wilkinson LJ, Kanno T, Jumagulova E, Kozłowska J, Patel J, McIntyre CA, Yam WC, **Siu GK**, Atkinson RA, Lam KW, Bansal SS, Drake AF, Mitchell GH, Mason AJ.Conformational Flexibility Determines Selectivity and Antibacterial, Antiplasmodial, and Anticancer Potency of Cationic α -Helical Peptides. *J Biol Chem.* 2012; 287(41):34120-33. (IF 2018: 4.01)
35. Zhu C, Zhang Y, Shen Y, **Siu GK**, Wu W, Qian X, Deng G, Xu Y, Lau R, Fan X, Zhang W, Lu H, Yam WC. Molecular characterization of fluoroquinolone-resistant Mycobacterium tuberculosis clinical isolates from Shanghai, China. *Diagn Microbiol Infect Dis.* 2012;73(3):260-3 (IF 2016: 2.401)
36. Lee AS, Ong DC, Wong JC, **Siu GK**, Yam WC. High-resolution melting analysis for the rapid detection of fluoroquinolone and streptomycin resistance in *Mycobacterium tuberculosis*. *PLoS One.* 2012;7(2);e31934. (IF 2018: 2.766)
37. **Siu GK (First Author)**, Zhang Y, Lau CK, Lau RW, Ho PL, Yew WW, Tsui KW, Cheng VC, Yuen KY Yam WC. Mutations outside rifampicin resistance determining region associated with rifampicin resistance in *Mycobacterium tuberculosis*. *J Antimicrob Chemother*, 2011. 66, 730-3. (IF 2018: 5.217)
38. Cheng VC, Yam WC, Tsang LL, Yau MC, **Siu GK**, Wong SC, Chan JF, To KK, Tse H, Hung IF, Tai JW, Ho PL, Yuen KY. Epidemiology of Klebsiella oxytoca-associated diarrhea detected by Simmons citrate agar supplemented with inositol, tryptophan and bile salts. *J Clin Microbiol.* 2012; 50(5):1571-9. (IF 2018: 4.045)
39. Cheng VC, Yam WC, Lam CT, **Siu GK**, Chan FW, To KW, Li WS, Tai WM, Ho PL, Yuen KY .*Clostridium difficile* isolates with increased sporulation: emergence of PCR ribotype 002 in Hong Kong. *Eur J Clin Microbiol Infect Dis.* 2011;30(11):1371-81. (IF 2018: 2.537)
40. **Siu GK (First author)**, Tam YH, Ho PL, Lee AS, Que TL, Tse WS, Yip KT, Lam TH, Cheng VC, Yuen KY, Yam WC. Direct detection of isoniazid-resistant *Mycobacterium tuberculosis* in respiratory specimens by multiplex allele-specific PCR. *Diagn Microbiol Infect Dis.* 2010. 69, 51-58 (IF 2016: 2.401)
41. Ong DC, Yam WC, **Siu GK**, Lee AS. Rapid detection of rifampicin- and isoniazid-resistant Mycobacterium tuberculosis by high-resolution melting analysis. *J Clin Microbiol.* 2010 Apr;48(4):1047-54. (IF 2018: 4.045)
42. Lau RW, Ho PL, Kao RY, **Siu GK**, Cheng VC, Yuen KY, Yam WC. Rapid diagnosis of multidrug-resistant smear-positive pulmonary tuberculosis. *Int J Antimicrob Agents.* 2010 Feb;35(2):202-3. (IF 2018: 4.253)

43. Boost MV, O'Donoghue MM, Siu KH. Characterisation of methicillin-resistant *Staphylococcus aureus* isolates from dogs and their owners. *Clin Microbiol Infect.* 2007;13(7):731-3 (IF 2016: 5.394)

II. Book Chapter

1. Yam WC, Siu GK. Rapid Identification of Mycobacteria and Rapid Detection of Drug Resistance in Mycobacterium tuberculosis in Cultured Isolates and in Respiratory Specimens. In Mark Wilks (ed.), *PCR Detection of Microbial Pathogens: Second Edition*, Methods in Molecular Biology, vol. 943.2012. Berlin, Germany, Springer Science+Business Media.

III. Conference Paper

1. Siu GK, Chen JH, Yam WC. Rapid Diagnosis of Sepsis by Direct Identification of Bacteria and Resistance Determinants from Positive Blood Cultures Using Verigene BC-GP and BC-GN test: A Multicenter Evaluation in Hong Kong.
- Conference: The 25th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID 2015). Copenhagen, Denmark, 25-28 April, 2015
 - Oral Presentation
2. Siu GK, Kwong TC, Yam WC. Large-scale evaluation of an integrated rapid molecular testing of multidrug resistant Mycobacterium tuberculosis in respiratory specimens.
- Conference: The 24th European Congress of Clinical Microbiology and Infectious Disease. (ECCMID 2014). Barcelona Spain, 10-13 May, 2014.
 - Poster Presentation

PhD Students Supervisorship (In capacity of Chief Supervisor)

2021	Lam Kwong LEE (Hong Kong)
2020	Hui Yin LAO (Hong Kong)
2019	Timothy Ting Leung NG (Hong Kong)
2018	Chala Chanurte GALATA (Ethiopia) (Supported by Hong Kong PhD Fellowship)
2017	Li ZHU (China)
2016	Ketema TAFESS TULU (Ethiopia) (Supported by Hong Kong PhD Fellowship) Graduated in 2020 - (Currently Professor in Arsi University, Ethiopia)
2014	Rahim Rajwani (Pakistan) Graduated in 2019 (currently Post-Doc fellow in NIH)

MEMBERSHIP OF PROFESSIONAL & LEARNED SOCIETIES

Professional Memberships and Qualifications

- 2017- Member, Hong Kong Medical Laboratory Technologists (MLT) Board
- 2017- Chairman, Examination Committee, Hong Kong MLT Board
- 2017- Chairman, Education Committee, Hong Kong MLT Board
- 2016- Technical Assessor, Accreditation Programme for Clinical Laboratories, HKAS
- 2016- Committee member, Accreditation programme for the veterinary testing laboratories, HKAS
- 2016- Committee member, Microbiology force task in accreditation programme for clinical laboratories, HKAS
- 2016- Committee member, Task force on Next Generation Sequencing for Medical Testing, HKAS
- 2016- Editorial Board Member, Journal of Clinical Microbiology, American Society of Microbiology (US)

MEDIA INTERVIEW AND PRESS CONFERENCE

TV show

- NOW TV news 【經緯線】病毒追蹤 [25 April 2021]
<https://news.now.com/home/local/player?newsId=432418>
- RTHK 【城市論壇】變種病毒入社區 檢測化驗問程序 [9 May 2021]
https://www.rthk.hk/radio/radio1/programme/City_Forum/episode/727812?lang=zh-hant
- RTHK 【The Pulse】Covid-19 mutant variants & quarantine arrangement in HK [14 May 2021]
<https://podcast.rthk.hk/podcast/item.php?pid=205&eid=179961&year=2021&lang=en-US>
- NOW TV news 【大鳴大放】新冠病毒變種
<https://news.now.com/home/local/player?newsId=434901>

Paper media interview

- **HK01** 專訪 | 憑基因排序揪出變種病毒 病毒獵人蕭傑恒：政府應協調統籌
https://www.hk01.com/article/631590?utm_source=01appshare&utm_medium=referral
- **HK01** 專訪 | 化驗隊晝夜無休DNA排序抗疫 病毒獵人嘆社會對理大有偏見
https://www.hk01.com/article/631593?utm_source=01appshare&utm_medium=referral
- **HK01** 專訪 | 理大基因分析揭聯合醫院爆疫之因 病毒「沿著地鐵站爆發」
https://www.hk01.com/article/631591?utm_source=01appshare&utm_medium=referral
- **立場新聞** 專訪 | 蕭傑恒料疫情已暫截斷 倡專家審視改善外判化驗所「假陽性拖累成件事」
<https://thestandnews.page.link/CY6tNXFprDYxN9xx9>
- **明報** 專訪 | {病毒株達人}蕭傑恒 傳播鏈「偵探」 基因排序揪變種堵漏洞
<https://news.mingpao.com/pns/%e5%89%af%e5%88%8a/article/20210124/s00005/1611427747197>
- **明報** 專訪 | 9款毒株8外來 輸入圍堵又輸入 理大專家讚本地圍堵好強 問機場檢疫「發生什麼事」
<https://news.mingpao.com/pns/%e6%b8%af%e8%81%9e/article/20201230/s00002/1609267601785>
- **明報** 專訪 | 佛堂群組病毒株本地演化 疑曾輸出歐洲
<https://news.mingpao.com/pns/%e6%b8%af%e8%81%9e/article/20201230/s00002/1609267603018>
- **明報** 專訪 | 親赴酒店測試檢疫漏洞 妻見照片「問罪」 學者：好難解釋
<https://news.mingpao.com/pns/%e6%b8%af%e8%81%9e/article/20201230/s00002/1609267603283>

Media & Time	Headline	Content (First paragraph)	Link
Broadcast			
RTHK 香港電台	理大：近兩個月輸入個案最少 27% 未在機場檢測被發現	理大分析本港新型冠狀病毒基因的變異與傳播情況，發現第三波疫情最常出現的 GR 型病毒株，在 9 月過後基本上已在香港消失，即是本港曾經戰勝病毒。而 10 月的本地個案則出現 GH 型病毒株，分析後相信是從外地傳入，病毒基因與印度及尼泊爾的輸入個案相似。	Link
RTHK 香港電台	本港增 8 宗輸入確診 理大稱輸入個案令病毒流入社區	本港新增 8 宗新型肺炎輸入個案，全屬輸入個案。	Link
RTHK 香港電台	'Airport Covid tests can miss a quarter of cases'	Polytechnic University researchers said on Monday that Covid-19 tests at the airport could miss at least a quarter of imported infections because of what could be "false negative" results.	Link
CRHK 商業電台	理大分析指第四波似乎即將爆發	理工大學分析本港新型冠狀病毒的基因及傳播率，指本港首三波新型冠狀病毒疫情，都是源於輸入個案，又指第四波疫情未開始，但似乎即將爆發。	Link
CRHK 商業電台	理大分析指本港第三波疫情 9 月本已完 惟輸入個案致上月再失守	理工大學分析本港新型冠狀病毒的基因及傳播率，發現第三波疫情最常見的 GH 型病毒株，在 9 月份已經在本港消失；上月份的本地病例，均驗出帶 GR 型病毒株，與印度及尼泊爾輸入個案相似，反映病毒已經變種，亦證明上月的本地個案，都是源於輸入病例。	N/A
Cable News 有線新聞	增 8 宗輸入個案 理大發現病毒株近兩月突變 與印度、尼泊爾相近 憂爆第四波疫情	【有線新聞】今日多 8 宗新型肺炎確診個案，全部是輸入病例，包括由印度、尼泊爾抵港。理工大學的基因排序研究發現，新型肺炎病毒株最近兩個月有突變，與印度、尼泊爾相近。	Link
TVB 無綫電視	理大研究指最近本地新冠肺炎源頭來自外地 促收緊入境檢疫	理工大學研究推斷，最近確診的新冠肺炎本地病例，源頭來自外地抵港的隱形患者，建議政府收緊入境人士檢疫措施。	Link
Newspaper			
Apple Daily 蘋果日報	武漢肺炎 理大研究稱已戰勝第三波疫情 惟港府防疫漏洞隨時引爆第四波	本港武肺疫情近日以輸入個案主導，情況與 6 月時第三波疫情爆發的前奏相似。理工大學醫療科技及資訊學系副教授蕭傑恒的團隊，最新病毒基因分析發現，9 月起本港出現全新的 GH 型武肺病毒株，首先來自尼泊爾及阿根廷的輸入個案，半個多月後蔓延至 China Secret 群組等多宗本地個案。分析證實，港人雖然捱過第三波疫情，但再因為政府阻截輸入個案有明顯漏洞，隨時重蹈覆轍。	Link
Oncc 東方日報	理大研究指本港曾打贏第三波疫情 輸入個案致再度失守	本地疫情仍然嚴峻，近日再爆出多宗源頭不明的本地個案，理工大學研究團隊今（16 日）發表研究內容，指分析本港病毒的基因變異情況及傳播率，本港第三波疫情的病毒主要是 GH 型病毒株，但該病毒株已於 9 月消失，反映本港一度「打贏」病毒。惟上月起的案例均帶有 GR 型病毒株，與尼泊爾及印度的輸入個案高度相似，估計是因酒店未有限制探訪隔離人士，導致社區再次失守。團隊建議港府應加強入境人士的隔離措施，包括考慮設立「檢疫酒店」等。	Link
Etnet 經濟通	【新冠肺炎】理大憂爆第四波：近三成輸入個案未在機場檢測時發現	《經濟通通訊社 16 日專訊》理工大學分析發現，上月的本地個案均源於輸入病例，而近三成輸入個案未能在機場即場檢測中發現，情況令人擔心，建	Link

		議政府加強入境人士的隔離措施，包括在機場設立專用化驗室、避免讓入境人士乘坐公共交通工具前往酒店、立法禁止探訪檢疫人士、酒店業界亦要與政府商討，設立「檢疫酒店」的可行性。	
Headline Daily 頭條日報	理大指本港曾戰勝第三波疫情 輸入個案再致傳播	本港疫情反覆，理大分析本港新冠病毒基因的變異與傳播情況，發現第三波疫情時本港曾經一度戰勝病毒，第三波疫情最常出現的GR型病毒株，在9月過後基本上已消失。而10月的本地個案則出現GH型病毒株，病毒基因與印度及尼泊爾的輸入個案相似，相信是從外地傳入。	Link
Hong Kong China News Agency 香港新聞網	香港理大研究表明香港近三成輸入個案無法在機場被測出	香港新聞網11月16日電 香港中通社前方記者報道，香港理工大學16日發表研究報告表明，香港最少27%的輸入個案無法在機場被檢測出來。	Link
HKEJ 信報	理大：第三波病毒株已消失 上月個案源於輸入病例	理大分析本港新型冠狀病毒基因的變異與傳播情況，指第三波疫情最常出現的GR型病毒株，9月過後基本上已在香港消失，即是本港曾戰勝病毒。而10月的本地個案則出現GH型病毒株，與印度及尼泊爾輸入個案相似，反映病毒已變種，亦證明上月的本地個案源於輸入病例。	Link
Sing Tao 星島日報	理大指本港曾戰勝第三波疫情 輸入個案再致傳播	本港疫情反覆，理大分析本港新冠病毒基因的變異與傳播情況，發現第三波疫情時本港曾經一度戰勝病毒，第三波疫情最常出現的GR型病毒株，在9月過後基本上已消失。而10月的本地個案則出現GH型病毒株，病毒基因與印度及尼泊爾的輸入個案相似，相信是從外地傳入。	Link
Online			
Stand News 立場新聞	【武漢肺炎】理大指本港曾「打贏」第三波疫情 輸入個案致再失守 促加強入境隔離措施	香港理工大學分析本港導致武漢肺炎的SARS-CoV-2病毒基因及傳播率，發現第三波疫情最常見的GR型病毒株，在9月份已於本港消失，可代表「打贏」該波疫情。不過，上月份的本地病例均驗出帶GH型病毒株，與印度及尼泊爾輸入個案相似，除反映病毒變種外，亦證明上月錄得的本地個案，均源於輸入病例。	Link
HK01	理大揭10月起新冠病毒流行種類已變 酒店探訪檢疫者或散出社區	本港新冠肺炎疫情反覆，理工大學團隊分析本港新型冠狀病毒的基因及傳播率，發現第三波疫情最常見的GR型病毒株，在9月份已經在本港消失。10月的本地病例，譬如China Secret酒吧群組、尖沙咀帝苑酒店群組、梅窩Staycation群組等，均驗出帶GH型病毒株，他們的病毒感染類型與印度及尼泊爾輸入個案相似。	Link
dotdotnews	理大團隊：本港第三波疫情源於輸入個案	香港理工大學早前研究本港新冠病毒的基因及傳播率，指本港首三波新冠病毒疫情都是源於輸入個案，又指第四波疫情雖未開始，但似乎即將爆發。理大研究團隊今日（16日）表示，第三波疫情最常見的GH型病毒株，在9月份已經在本港消失；上月份的本地病例，均驗出帶GR型病毒株，與印度及尼泊爾輸入個案相似，反映病毒已經變種，亦證明上月的本地個案，都是源於輸入病例。	Link
Bastille Post 巴士的報	理大：第三波疫情曾一度消失 輸入個案再致傳播	本港疫情反覆，理大分析本港新冠病毒基因的變異與傳播情況，發現第三波疫情時本港曾經一度戰勝病毒，第三波疫情最常出現的GR型病毒株，在9月過後基本上已消失。	Link
Bastille Post 巴士的報	理大：近兩個月輸入個案最少27%未在機場檢測被發現	理大分析本港新型冠狀病毒基因的變異與傳播情況，發現第三波疫情最常出現的GR型病毒株，在9月過後基本上已在香港消失，即是本港曾經戰勝病	Link

		毒。而 10 月的本地個案則出現 GH 型病毒株，分析後相信是從外地傳入，病毒基因與印度及尼泊爾的輸入個案相似。	
Bastille Post 巴士的報	本港增 8 宗輸入確診 理大稱輸入 個案令病毒流入社區	本港新增 8 宗新型肺炎輸入個案，全屬輸入個案。	Link
Yahoo News Yahoo 新聞	理大：近兩個月輸入個案最少 27% 未在機場檢測被發現	理大分析本港新型冠狀病毒基因的變異與傳播情況，發現第三波疫情最常出現的 GR 型病毒株，在 9 月過後基本上已在香港消失，即是本港曾經戰勝病毒。而 10 月的本地個案則出現 GH 型病毒株，分析後相信是從外地傳入，病毒基因與印度及尼泊爾的輸入個案相似。	Link