

Yasine Malki, Ph.D. Student | *Resume*

Centre For Novostics
Department of Chemical Pathology
The Chinese University of Hong Kong
Faculty of Medicine

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EDUCATION

The Hong Kong University of Science and Technology (HKUST) Sept 2016 –
The Division of Life Science, School of Science June 2020

- BSc. in Biochemistry and Cell Biology, double minors in Chemistry and Bioengineering
- Cumulative **GPA: 4.00 / 4.30**
- Recipient of **HKUST Academic Achievement Medal** (Highest Graduating Honour)
- **Ranked 1st in the Division of Life Science, class of 2020 cohort (250+ student cohort)**

Cornell University (Ithaca Campus, New York) Jan 2019 –
CALS – College of Agriculture and Life Science June 2019

- Semester Exchange.

The Chinese University of Hong Kong (CUHK) Faculty of Medicine July 2022 –
Department of Chemical Pathology – Centre for Novostics and Prince of Wales Hospital Present

- Ph.D. candidate in Chemical Pathology
- Awardee of the Butterfield-Croucher studentship, Sir Edward Youde Memorial Fellowship, Hong Kong PhD Fellowship awardee and CUHK Vice-Chancellor Scholar.
- Supervisor: Professor Dennis Lo Yuk-Ming

RESEARCH EXPERIENCE

The Hong Kong University of Science and Technology | Prof. Guo Yusong Sept 2017 –
▪ Undergraduate Research Internship. Division of Life Science. Dec 2017

The University of Sussex, UK | Prof. Chan Kok-Lung June 2018 –
▪ Undergraduate Research Internship. Genomic Disease and Stability Centre, UK. Sept 2018

The Hong Kong University of Science and Technology | Prof. Huang Xuhui and Prof. Cheung Peter Pak Hang Sept 2018 –
▪ Undergraduate Research Internship. Department of Chemistry, HKUST. Dec 2018

Cornell University | Prof. Pawlowski Wojtek Feb 2019 –
▪ Undergraduate Research Intern. College of Agriculture and Life Sciences. Part of June 2019
Cornell's 'Undergraduate Independent Research Project'.

The Shanghai Jiao Tong University | Prof. Wang Yongting and Prof. Tang Yaohui June 2019 –
▪ Undergraduate Research Intern. School of Biomedical Engineering. Aug 2019

The Hong Kong University of Science and Technology | Prof. Chung Kenny K. Aug 2019 –
▪ Final-Year Lab Thesis. Division of Life Science. June 2020

The University of Hong Kong | Prof. Ho Shu Leong and Dr. Ho-Wing Lok June 2020 –
▪ **Division of Neurology, Li Ka Shing Faculty of Medicine** June 2022

- Ph.D. Student. Department of Chemical Pathology, Faculty of Medicine.
- Involved in projects related to the biology of cell-free DNA, the study of fragmentomics and epigenetic profiles of cfDNA.
- Mechanistic study of plasma cell-free DNA concentration and the link to nuclease biology
- The application of cfDNA in assessing neurological conditions
- Exploring the roles of nucleases in the fragmentation patterns of cfDNA

PUBLICATIONS

- Pang SYY, Lo RNM, Ho PWL, Liu HF, Chang EES, Leung CT, **Malki Y**, Choi ZYK, Wong WY, Kung MHW, Ramsden DB, Ho SL. LRRK2, GBA and their interaction in the regulation of autophagy: implications on therapeutics in Parkinson's disease. *Translational Neurodegeneration*. 2022 Jan.
- Chang EES, Ho PWL, Liu HF, Pang SYY, Leung CT, **Malki Y**, Choi ZYK, Ramsden DB, Ho SL. LRRK2 mutant knock-in mouse models: therapeutic relevance in Parkinson's disease. *Translational Neurodegeneration*. 2022.
- Li LF, Ho PWL, Liu HF, Pang SYY, Chang ESS, Choi ZYK, **Malki Y**, Kung MHW, Ramsden DB, Ho SL. Transcriptional Regulation of Synaptic Vesicle Protein Synaptogyrin-3 (SYNGR3) Gene: NURR1 Effects on its Expression. *Int J Mol Sci*. 2022.
- Ho PWL*, Chang ESS*, Leung CT, Liu HF, **Malki Y**, Pang SYY, Choi ZYK, Liang YM, Lai WS, Ruan YF, Leung KMY, Yung S, Mak JCW, Kung MHW, Ramsden DB, Ho SL. Long-term inhibition of mutant LRRK2 hyper-kinase activity reduced mouse brain α -synuclein oligomers without adverse effects. *NPJ Parkinson's Disease*. 2022
- Chang ESS*, Liu HF, Choi ZYK, **Malki Y**, Zhang XYS, Pang SYY, Kung MHW, Ramsden DB, Ho SL., Ho PWL. Loss of mitochondrial Ca²⁺ response and CaMKII/ERK activation by LRRK2R1441G mutation correlate with impaired depolarization-induced mitophagy. *Cell Communication and Signaling*. 2024
- **Malki Y***, Kang G*, Lam WKJ*, Zhou Q, Cheng SH, Cheung PPH, Bai J, Chan ML, Lee CT, Peng W, Zhang Y, Gai W, Wong W, Ma M-JL, Li W, Xu X, Gao Z, Tse I, Shang H, Choy LYL, Jiang P, Chan KCA, Lo YMD. Analysis of a cell-free DNA-based cancer screening cohort links fragmentomic profiles, nuclease levels, and plasma DNA concentrations. *Genome Research*. 2024
- Ho PWL*, Choi ZYK, **Malki Y**, Chang ESS, Liu HF, Pang SYY, Kung MHW, Ramsden DB, Ho SL. Chronic feeding of Ambroxol ad libitum increased glucocerebrosidase (GCase) activity and reduces alpha-synuclein phosphorylation and oligomer accumulation in aged LRRK2 mutant mouse striatum. *Translational Neurodegeneration*. 2025 (submitted)
- Zhang X*, Cai Y*, Sit HM, Jian RX, **Malki Y**, Zhang Y, Ong CYC, Li Q, Lam RPK, Rainer TH. Cell-free nucleic acids for early diagnosis of acute ischemic stroke: a systematic review and meta-analysis. *Int J Mol Sci*. 2025.
- Lam WKJ, Ma BBY, King AD, **Malki Y**, Chan KCA, Chan ATC. Achieving control of nasopharyngeal carcinoma: the impact of screening and prevention. *Nature Reviews Clinical Oncology*. 2025 (submitted)

PATENT APPLICATIONS

- Relative and absolute cell-free DNA concentrations for clinical utilities (US Provisional Patent application, filed in 2024) – Lo Y.M., Chan, K. C. A., Jiang P., Lam W. K., **Malki Y**, Kang G.
- Fragmentomics in Cerebrospinal Fluid (US Provisional Patent application, filed in 2024) - Lo Y.M., Chan, K. C. A., Jiang P., **Malki Y**. 2024

INTERNATIONAL CONFERENCES ATTENDED

- Alzheimer's & Parkinson's Diseases Conference (AD/PD) – 2021
- 72nd Lindau Nobel Laureate Meeting (Physiology/Medicine) – 2023
- 13th International Symposium on Circulating Nucleic Acids in Plasma and Serum (CNAPS) – 2024

HONORS AND AWARDS

Hsu Chi Liang Scholarship Outstanding Academic Result Award (2014-2016)

HKUST Admission Scholarship (2016-17)

HKSAR Government Scholarship Fund - Reaching Out Award (2018-19)

Fung Scholarship (2018-19)

DH Chen Foundation Life Science Scholarship (Two time awardee, 2017-18 and 2018-19)

Academic Excellence Award (Two time awardee, 2017-18 and 2018-19)

AEON Credit Service Scholarship (2018-19)

University Scholarship Scheme for Continuing Undergraduate Students (2018-20)

HKUST Undergraduate Research Opportunity Program Summer School Sponsorship (2019-20)

Li Po Chun Charitable Trust Fund Scholarships (2019-20)

Six-time awardee of HKUST Dean's Honor List (2016-2020)

HKUST Academic Achievement Medal (2020)

Chinese University of Hong Kong Vice-Chancellor's PhD Scholarship (2022 to 2026)

Hong Kong PhD Fellowship Scheme, HKPFS (2022 to 2026)

Croucher Foundation Research Studentship (2022 to 2025)

Butterfield-Croucher Studentship (2022 to 2025)

Sir Edward Youde Memorial Fellowships for Postgraduate Study (2025)