

陳君賜



ALLEN CHAN



Principal Investigator

Allen Chan



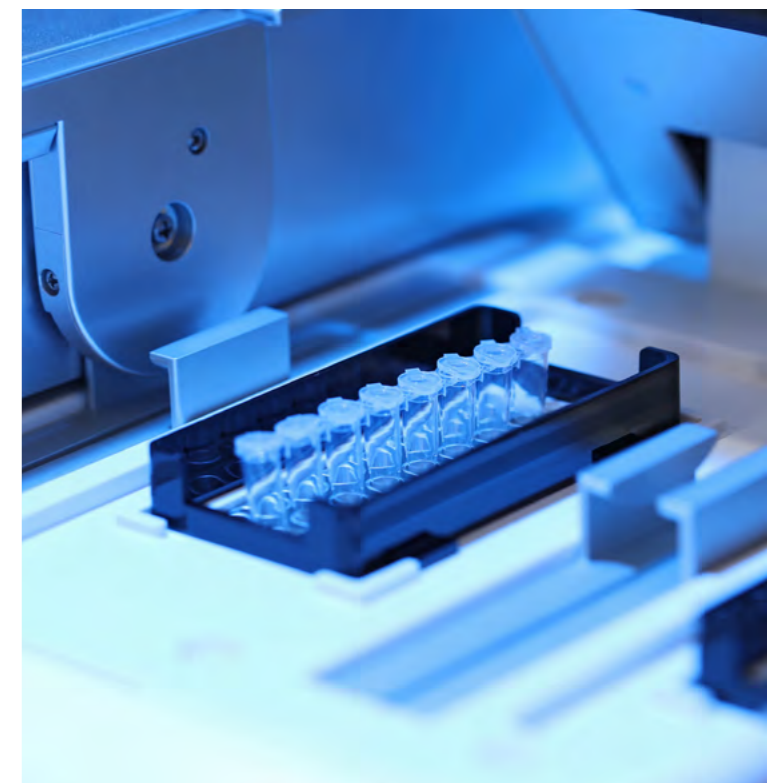
Team members

Jacky Lam , Wanxia Gai, Charles Chan, Sherwood Fung, Vicky Lee, Irene Tse, Amy Tsang, Maggie Li, Patrick Lee, Vivien Lin, Jack Cheung, Kaede Chau, Olive Wong, Sze Wan Wong

Research Progress Summary

Allen Chan and his research team have completed the re-screening activities of all the study participants and are currently performing the data analysis and preparing for the manuscript.

In addition, they have organised the virtual Nasopharyngeal Cancer (NPC) Screening Conference on 4-6 November 2021 and invited over 40 experts from various disciplines to discuss on NPC screening. Their ultimate goal is to develop recommendations on the use of EBV-based markers for screening of NPC.



02 MOLECULAR DIAGNOSTICS

Plasma Nucleic Acids Research

Research and Scholarship

Research Awards and Recognitions

Member's Name	Details	
	Award	Organisation
Allen Chan	Top 20 Translational Researchers of 2020	Nature Biotechnology
Jacky Lam	Postgraduate Research Output Award 2020	The Chinese University of Hong Kong

Reviewer of Journal / Conference

Member's Name	Details	
	Role	Journal / Conference
Allen Chan	Convenor	Nasopharyngeal Cancer Screening Conference
Jacky Lam	Organising Committee Member	Nasopharyngeal Cancer Screening Conference

Grants and Consultancy

Name	Project Title	Funding Source	Start Date (dd/mm/yyyy)	End Date (dd/mm/yyyy)	Amount (HKS)
Allen Chan	Centre for Novostics	Innovation and Technology Commission – InnoHK Scheme	01/05/2020	30/04/2025	Not to be disclosed
	Prospective 20,000-Person Nasopharyngeal Carcinoma (NPC) Screening Programme Using Plasma Epstein-Barr Virus (EBV) DNA Analysis	Kadoorie Charitable Foundation	01/04/2013	31/03/2023	9,400,000

Publications

A. Journal Papers

- Vong JSL, Ji L, Heung MMS, Cheng SH, Wong J, Lai PBS, Wong VWS, Chan SL, Chan HLY, Jiang P, Chan KCA, Chiu RWK, Lo YMD. Single cell and plasma RNA sequencing for RNA liquid biopsy for hepatocellular carcinoma. *Clinical Chemistry*. 2021;67(11):1492-1502. doi:10.1093/clinchem/hvab116.
- Yu SCY, Jiang P, Peng W, Cheng SH, Cheung YTT, Tse OYO, Shang H, Poon LC, Leung TY, Chan KCA, Chiu RWK, Lo YMD. Single-molecule sequencing reveals a large population of long cell-free DNA molecules in maternal plasma. *Proceedings of the National Academy of Sciences of the United States of America*. 2021;118(50):e2114937118. doi:10.1073/pnas.2114937118.
- Zhou Z, Cheng SH, Ding SC, Heung MMS, Xie T, Cheng THT, Lam WKJ, Peng W, Teoh JYC, Chiu PKF, Ng CF, Jiang P, Chan KCA, Chiu RWK, Lo YMD. Jagged ends of urinary cell-free DNA: Characterization and feasibility assessment in bladder cancer detection. *Clinical Chemistry*. 2021;67(4):621-630. doi:10.1093/clinchem/hvaa325.
- Fung SYH, Chan KCA, Wong EWY, Ng CWK, Cho R, Yeung ZWC, Lam JWK, Chan JYK. Droplet digital PCR of tumor suppressor gene methylation in serial oral rinses of patients with head and neck squamous cell carcinoma. *Head & Neck*. 2021;43(6):1812-1822. doi:10.1002/hed.26647.
- Han DSC, Ni M, Chan RWY, Wong DKL, Hiraki LT, Volpi S, Jiang P, Lui KO, Chan KCA, Chiu RWK, Lo YMD. Nuclease deficiencies alter plasma cell-free DNA methylation profiles. *Genome Research*. 2021;31(11):2008-2021. doi:10.1101/gr.275426.121.
- Gai W, Zhou Z, Agbor-Enoh S, Fan X, Lian S, Jiang P, Cheng SH, Wong J, Chan SL, Jang MK, Yang Y, Liang RHS, Chan WK, Ma ESK, Leung TY, Chiu RWK, Valentine H, Chan KCA, Lo YMD. Applications of genetic-epigenetic tissue mapping for plasma DNA in prenatal testing, transplantation and oncology. *eLife*. 2021;10:e64356. doi:10.7554/eLife.64356.
- Tse OYO, Jiang P, Cheng SH, Peng W, Shang H, Wong J, Chan SL, Poon LCY, Leung TY, Chan KCA, Chiu RWK, Lo YMD. Genome-wide detection of cytosine methylation by single molecule real-time sequencing. *Proceedings of the National Academy of Sciences of the United States of America*. 2021;118(5):e2019768118. doi:10.1073/pnas.2019768118.
- Ma MJL, Yakovenko S, Zhang H, Cheng SH, Apryshko V, Zhavoronkov A, Jiang P, Chan KCA, Chiu RWK, Lo YMD. Fetal mitochondrial DNA in maternal plasma in surrogate pregnancies: Detection and topology. *Prenatal Diagnosis*. 2021;41(3):368-375. doi:10.1002/pd.5860.
- Sin STK, Ji L, Deng J, Jiang P, Cheng SH, Heung MMS, Lau CSL, Leung TY, Chan KCA, Chiu RWK, Lo YMD. Characteristics of fetal extrachromosomal circular DNA in maternal plasma: Methylation status and clearance. *Clinical Chemistry*. 2021;67(5):788-796. doi:10.1093/clinchem/hvaa326.