

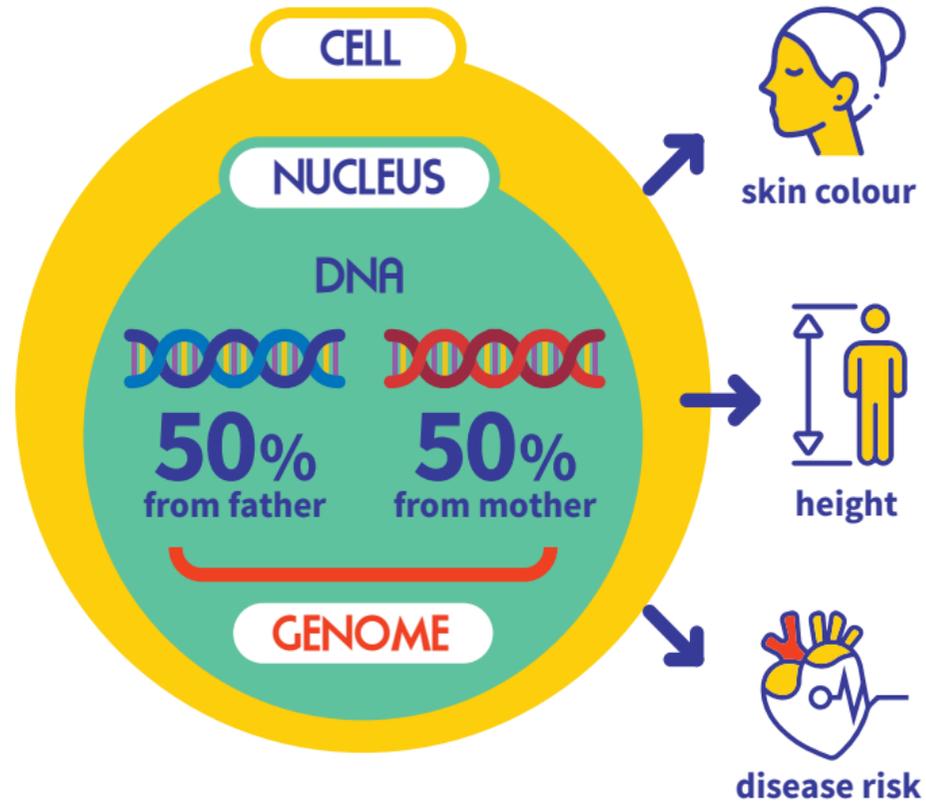
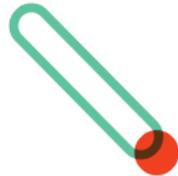


Strategic Development of
genomic
MEDICINE IN HONG KONG



WHAT IS A GENOME?

Genome is your complete set of genetic material (i.e. DNA) passed down from parents. Everyone's genome is unique. It determines your traits like skin colour, height and disease risk that make you unique.



WHAT ARE THE BENEFITS OF GENOMIC MEDICINE?



More precise diagnosis



Avoid unnecessary investigations



More personalised treatment



More accurate prediction of disease development



More chances to explore new medicine and treatment



More efficient ways to prevent diseases

For example: “Non-invasive Prenatal Test” (NIPT), which is a blood test to analyse foetal DNA present in a pregnant woman’s plasma, can detect Down syndrome more accurately with lower risk of miscarriage compared to other conventional prenatal screening tests.

Scan me for more details about NIPT





BRINGING BRIGHT MINDS TOGETHER



“ *To harness the potential of new technology for better public health policies and clinical outcomes, we will set up a steering committee to lead the study on strategies for developing genomic medicine in Hong Kong.* ”

2017 Policy Address



The Secretary for Food and Health appointed the Steering Committee on Genomic Medicine (the Steering Committee) in December 2017 to lead the study on strategies for developing genomic medicine in Hong Kong. The Steering Committee submitted its report to the Government in December 2019.



ARE WE READY FOR GENOMIC MEDICINE?

The Steering Committee identified the following key issues to be addressed in order to develop genomic medicine in Hong Kong:



More standardised clinical service



Better coordination of laboratory services and translation of new technology to clinical use



More specialists and better genomic knowledge among healthcare professionals



Greater emphasis on ethical and legal issues, such as privacy protection and discrimination



8 RECOMMENDATIONS
PROPOSED BY
THE STEERING COMMITTEE



ENHANCEMENT OF GENETIC AND GENOMIC SERVICES AND RESEARCH

1

Launching the Hong Kong Genome Project (HKGP)

“

The project will enhance the diagnostic rate of uncommon disorders and promote research on cancers and other hereditary diseases through genome sequencing and the establishment of a genome database.

”

2019 Policy Address

To establish The Hong Kong Genome Institute in 2020 to implement the Hong Kong Genome Project.



Hong Kong Genome Project

2000 cases

40000 to
50000 genomes

18000 cases

Pilot Phase

undiagnosed disorders and cancers, with clinical clues linked to possible hereditary components.

Main Phase

diseases covered in pilot phase, plus other diseases and research cohorts which would benefit from whole genome sequencing.

HKGP will serve as a catalyst and anchor for showcasing the clinical benefits, piloting related new policy measures, building up talent pool and testing clinical protocols.

2

Enhancing clinical services on genetics and genomics

To provide more standardised clinical services on genetics and genomics in our public healthcare system to benefit more patients.

Scan me for more details

about the Strategic Service Framework for Genetic and Genomic Services of the Hospital Authority



CAPACITY BUILDING

3

Nurturing talents in genomic medicine

To build up a local talent pool of genetic and genomics professionals in collaboration with universities and professional bodies.



clinical geneticists



pathologists



genetic counsellors



bioinformaticians



laboratory scientists

More genomic training and education for healthcare professionals to increase the use of genomic medicine in routine healthcare services.

4

Enhancing public engagement in genomic medicine

To enhance public understanding on the benefits and limits of genomic medicine, encourage public to consult healthcare professionals before undertaking genetic and genomic tests, enhance public awareness of relevant privacy protection measures, etc.



WE CARE FOR YOU

INFRASTRUCTURE BUILDING



5

Enhancing the laboratory network with effective referral mechanism and centralisation of advanced genetic and genomic tests

To provide more patients with high quality genetic and genomic tests by more efficient use of manpower and resources.



6

Facilitating the establishment of a biobank network for genomic research

To facilitate sharing of de-identified biospecimens and associated data for future genomic researches to increase the chance for new research findings.



REGULATORY MEASURES

7

Enhancing the regulation on the use of genetic data for insurance and employment purposes

To introduce more specific measures to protect the public against possible discrimination in association with the use of genetic data for insurance and employment purpose.



WE UNDERSTAND
YOUR CONCERN

8

Promoting the proper use of genetic and genomic tests

To advise the public to consult healthcare professionals before taking health-related genetic and genomic tests, in order to avoid unnecessary anxiety or false assurance.

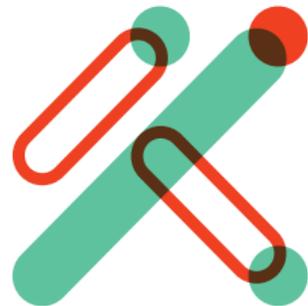
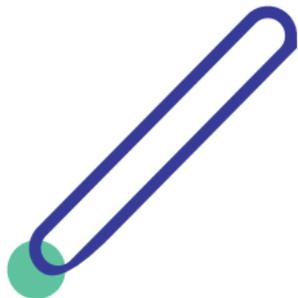


CONSULT HEALTHCARE
PROFESSIONALS FIRST

Scan me for more details

about the health advice of
the Department of Health on
direct-to-consumer genetic tests





Scan me for the full
report of the Steering
Committee on
Genomic Medicine



Food and Health Bureau

The Government of the Hong Kong Special Administrative Region

For any enquiries, please email to genomics@fhb.gov.hk April 2020

