中華人民共和國香港特別行政區政府總部教育局
Education Bureau
Government Secretariat, The Government of the Hong Kong Special Administrative Region
The People's Republic of China

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19 October 2021

Clerk to the Legislative Council Finance Committee
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong
(Attn.: Miss Bowie Lam)

Dear Miss Lam,

Finance Committee

Follow-up action of the meeting on 24 September 2021

56EF Centralised General Research Laboratory Complex (Block 2)

At the meeting of the Finance Committee (FC) held on 24 September 2021, Members requested for supplementary information from The Chinese University of Hong Kong on the captioned project. The University's response is set out at **Annex**, for Members' reference please.

Yours sincerely,

(MC Mok)
for Secretary for Education

c.c. Secretary-General, University Grants Committee (Attn: Miss Jenny Cheung)
Vice-President (Administration) and University Secretary,
The Chinese University of Hong Kong

Annex

Supplementary Information arising from the Finance Committee meeting on 24 September 2021 provided by The Chinese University of Hong Kong

How would the Centralised General Research Laboratory Complex (Block 2) facilitate research development in Life Sciences and Biomedical Sciences

This project is an integral part of The Chinese University of Hong Kong ("CUHK")'s strategic campus development plan with the aim to develop the northern part of its campus into a research hub focusing on the sphere of life and biomedical sciences. The proposed new building is adjacent to the Centralised General Research Laboratory Complex (Block 1). Together with the Hong Kong Science Park in the vicinity, the project will foster collaboration opportunities in the development of downstream technology.

2. The users of this project will include the State Key Laboratory of Agrobiotechnology (CUHK), the School of Life Sciences, and the School of Biomedical Sciences, whose research focuses are in line with the "Environment and Sustainability" and "Innovative Biomedicine" strategic research areas of "CUHK 2025". To provide research infrastructure to support these strategic research areas, the following laboratories and advanced facilities will be set up under this project:

(a) specialised laboratories equipped with high-precision instruments such as electron microscopes, mass spectrometers, X-ray diffractometer;
(b) a greenhouse for plant and agricultural biology and biotechnology research;
(c) research facilities for animal models of human diseases;
(d) a data and computation centre for bioinformatics research; and
(e) a herbarium for supporting a STEM (Science, Technology, Engineering and Mathematics) education platform and plant research.

3. This project will include a connecting footbridge with the Centralised General Research Laboratory Complex (Block 1) which will facilitate interaction amongst researchers of the life sciences and biomedicine disciplines, as well as enable the shared and better use of research facilities. The Laboratory Complex will support various research activities, including the application of biotechnology in tackling food security problems and the development of new treatments for human diseases such as rare genetic neurological diseases. Over the years, CUHK has

been successful in translating world-leading basic academic research findings into applications through knowledge transfer. The new Laboratory Complex will provide the space and infrastructure to support CUHK's strategic research areas on "Environment and Sustainability" and "Innovative Biomedicine" and effectively realise the goal of developing Hong Kong into an international innovation and technology hub as outline by the national 14th 5-year plan.

How would this project synergise with other research centres / laboratories of CUHK in the Mainland (e.g. Futian, Shenzhen)

4. The Shenzhen Research Institute, CUHK ("SZRI") has the vision of pushing forward CUHK's translational research and realising the development strategies of CUHK in the Mainland. Over the years, researchers at CUHK have been maintaining close collaboration with the SZRI in promoting and translating their research in areas such as information technology, biomedicine and sustainable development. In fact, many professors in the life sciences and biomedicine disciplines at CUHK have research laboratories at SZRI which also houses a research base under the State Key Laboratory of Agrobiotechnology. This project will create a synergy effect with SZRI in helping the CUHK research team in life sciences and biomedicine translate their research findings in the Mainland.

Advantages and research achievements of agricultural science in CUHK

5. The State Key Laboratory of Agrobiotechnology is a national-level laboratory established by The Ministry of Science and Technology (MOST). CUHK has made outstanding achievements on the Plant and Agricultural Science aspects, with the award of three University Grants Committee's Areas of Excellence grants[1] and long-term collaboration with scientific research teams in the Mainland. In 2008, CUHK obtained MOST's approval to establish a partner laboratory with the State Key Laboratory of Agrobiotechnology of China Agricultural University. The partner laboratory was subsequently rectified as the State Key Laboratory of Agrobiotechnology (CUHK) in 2018. Since its establishment, the State Key Laboratory of Agrobiotechnology strives to fulfil its vision to safeguard national food security with modern biotechnology, with world-leading research findings in

[1] Centre for Plant and Agricultural Biotechnology (in 2000); Centre for Organelle Biogenesis and Function (in 2014); and Centre for Genomic Studies on Plant-Environment Interaction for Sustainable Agriculture and Food Security (in 2016).

the genonme research of soybean presented by the research team led by Prof LAM Hon-ming, Director of the Laboratory. Through collaboration with Gansu Academy of Agricultural Sciences, the research team successfully applied their genome research findings to develop a new soybean variant that can be planted in draught land with high salt content (e.g. North West China), thereby offering contributions to the country on the areas of food and agriculture. Throughout the years, Prof Lam helped strengthen the bond between Mainland and Hong Kong scholars and research students through hosting agricultural experts from the Mainland for studies and exchanges at CUHK on numerous occasions. Upon the completion of this project, CUHK would be able to provide a more comprehensive space and facilities for the collaboration of research teams and personnel from the Mainland and Hong Kong to face the challenges relating to food safety and climate change.

The Chinese University of Hong Kong
October 2021