For discussion 20 February 2024

Legislative Council Panel on Commerce, Industry, Innovation and Technology

Subsidy Programme for the Setup of Life and Health Technology Research Institute(s)

Purpose

This paper briefs Members on the Subsidy Programme to assist universities to set up life and health technology research institutes ("LHTRIs") ("the Subsidy Programme"). The objective is to foster cross-university, cross-institutional and multi-disciplinary co-operation to promote the life and health technology development in Hong Kong.

Background

- 2. In recent years, life and health technology has become one of the core areas in the global innovation and technology ("I&T") landscape. economies are more inclined to actively enhance their support to basic life and health technology research. This has contributed to the continuous improvement in the research capabilities of the core technology in the key fields of life and health science, as well as the increase of strategic and technological capabilities on disease control and prevention. This brings enormous opportunities to the development of life and health technology in Hong Kong which enjoys clear advantages in this area. We have five top 100 universities and two top 40 medical schools in the world, reputable clinical centres which are recognised by the National Medical Products Administration, and their data, which meet the relevant clinical trial standards, are also widely recognised by the relevant regulatory bodies in the United States and the European Union. Indeed, with the positioning of Hong Kong as an international I&T centre under the "Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Objectives Through the Year 2035" and the emphasis on frontier fields such as life and health disciplines therein, it is important for Hong Kong to leverage its strengths in life and health science to meet the country's needs.
- 3. Against this backdrop, the Financial Secretary has announced in his 2023-24 Budget that the Government would launch a \$6 billion Subsidy Programme to provide funding subsidies to support local universities to set up LHTRIs. These institute(s) will feature cross-universities / institutions and multi-disciplinary collaboration. Experience elsewhere has suggested that

establishing cross-institutional and cross-disciplinary research institutes in "larger scale" can promote research co-operation and attract top-notch scholars and scientists from different background. This can help drive breakthrough and transformation by expediting the translation of innovative technologies to tackle increasingly complex biological-, health- and public health-related challenges. In addition, a more sizable research institute can facilitate nurturing talent by providing a comprehensive career path and more advanced research opportunities. LHTRIs, together with various programmes and measures being or will be implemented¹, would help build a comprehensive I&T ecological chain with upstream, midstream and downstream activities. This will be conducive to building a vibrant life and health technology ecosystem in Hong Kong.

The Subsidy Programme

4. Under the Subsidy Programme, funding subsidies will be provided to support local universities to set up research institute(s) in Hong Kong in the field of life and health technology to foster multi-disciplinary co-operation and collaboration with universities and / or research institutions on the Mainland and overseas. These institutes will focus on basic research, translational research as well as transformation of R&D outcomes related to life and health technology. The top-notch scholars and scientists worldwide so attracted will help build a research ecosystem leveraging the complementary strengths across different institutions and disciplines in Hong Kong, bringing impacts to the society at large. The key parameters of the Subsidy Programme are set out in the ensuing paragraphs.

Eligibility

5. Application is institution-based. An applicant institution must be a local university funded by the University Grants Committee ("UGC") with medical school and / or is offering life and health disciplines. Applications can be submitted jointly by universities, research institutes and other parties. For such joint applications, a UGC-funded university must take on the role as the leading applicant.

Eligible themes

6. The LHTRI(s) should engage in basic research, translational research as well as transformation of R&D outcomes on themes falling within the field of life and health-related technologies. The themes may include but would not be limited to cell and gene therapy, bioinformatics and biology, biomedical

Such as InnoHK clusters, the Research, Academic and Industry Sectors One-plus Scheme, enhanced support to the Technology Transfer Office of universities, the New Industrialisation Funding Scheme, the New Industrialisation Acceleration Scheme, etc..

engineering, advanced therapy, medical diagnostics, drug and vaccine development, and clinical trial.

Key requirements

- 7. An application must comprise all of the following compulsory elements
 - (a) **multi-disciplinary co-operation** in R&D activities;
 - (b) **international collaboration**. As a key element of the Subsidy Programme is to attract top-notch scholars and scientists to Hong Kong, priority will be accorded to proposals to be led by world-class scholars and scientists on the related fields²;
 - collaboration with other universities / research institutions. The LHTRI(s) should include long-term R&D collaboration among local universities and top-notch universities / research institutions / research teams from the Mainland and overseas; and
 - (d) **funding subsidy on matching basis**. In order to encourage collaboration amongst academic, research and industry sectors, funding will be provided on a matching basis. It is suggested that a matching ratio of up to 4 (Government): 1 (university and / or industry) would be applied. At least half of the contribution from the university and / or industry should be non-in-kind support³. In-kind support can be in the form of, for example, essential equipment and / or other non-cash support.
- 8. Applicant institution(s) will need to submit proof of collaboration with other institution(s) and key research personnel. Where an application is successful, the applicant institution(s) shall enter into an agreement with the Government. The applicant institution(s) shall ensure that the LHTRI(s) are expected to commence operation within 18 months from the signing of the agreement and operate for a reasonable longer period (say, at least 10 years from its commencement). If a LHTRI fails to perform according to the applicant institution(s)'s agreement with the Government, the Government shall be entitled

These scholars and scientists will usually bring with them their research teams and research outcomes. There will accordingly be additional benefits to Hong Kong.

Non-in-kind contribution can be in a form of capital investment and / or sponsorships. It must be a non-repayable cash contribution or an investment with no redeemable requirement so that the contribution would not become a potential debt for the LHTRI. Convertible notes and equity investment with redemption clause are not acceptable.

to terminate the agreement early. The Government is entitled to recover the funding amount in the unlikely event that certain funding is in the end not applied exclusively for the purpose of the LHTRI.

Funding arrangements and scope

- 9. We propose the number of selected LHTRI(s) will be not more than three (i.e. at most three LHTRIs will be set up under the Subsidy Programme). The amount of funding subsidy to be recommended for each selected LHTRI will depend on the merits of individual proposal and on a matching basis. Funding subsidy offered under this Subsidy Programme is one-off and may be paid out to a LHTRI in tranches.
- 10. Funding subsidy can be used to provide financial support to the LHTRIs, which may include (but not limited to) the following
 - (a) operating cost, including remuneration for scholars and research teams during the subsidy period;
 - (b) purchase of equipment;
 - (c) R&D associated cost; and
 - (d) set-up cost of the LHTRI, including one-off fitting-out / renovation / upgrade.
- 11. Under the cardinal principle to avoid double benefit, a LHTRI shall not seek funding support from other programmes funded by the public coffer for the expenditure items already covered under this Subsidy Programme.
- 12. No subsidy will be given for rental purpose under this Subsidy Programme. An applicant institution should arrange to secure a venue to set up the LHTRI on its own accord. The applicant institution should provide concrete proof that the space or premises intended to be used for the LHTRI has already been secured when submitting the application.

Teaching arrangements and Intellectual Property ("IP") arrangements

13. To encourage the research teams in the universities to conduct R&D work in the LHTRIs, we will allow universities to make use of the funds under the Subsidy Programme to ensure that the remuneration level of staff participating in the LHTRI can be maintained; or to employ additional staff to strengthen the general support for teaching activities of the universities so that staff participating in the LHTRI could devote more time to focus on the R&D work. Universities

may also choose to bear the above expenses and regard such commitment as inkind contribution to the research project.

Regarding the IP arrangements, we recommend that research teams / inventors should be entitled to no less than 70% of the IP benefits (for IPs generated by the research teams / inventors during the research period). This practice can provide greater incentive for local, Mainland and overseas research teams to join the LHTRIs. All parties concerned should agree on the IP benefit sharing arrangements in writing before the commencement of the research project.

Submission of Application

15. An application should comprise relevant information of a proposed LHTRI, including the collaborating institutions, objectives, expected deliverables, ownership and governance structure, research projects, details of multi-disciplinary co-operation, venue, manpower and resources commitment, implementation plan, IP arrangements, business plan, budget, detailed breakdown of university and industry contribution, support to be provided by the relevant university(ies), proposed milestones and performance indicators.

Processing of Applications

- 16. Applications should be submitted to the Secretariat for the Subsidy Programme to be set up under the Innovation and Technology Commission ("ITC"). An Assessment Committee, comprising academia, industry players and government officials, will be formed for assessing the applications after preliminary vetting by the Secretariat. Assessment will be based on the merits of each application along the following areas
 - (a) standing and reputation of the scholars and scientists involved, including in particular those from outside Hong Kong;
 - (b) relevance of the innovation and technology component(s) and research theme(s) with government policies and how far they can benefit the community;
 - (c) technical and management capability of the research teams and research collaboration (including local, Mainland and overseas research teams);
 - (d) the financial sustainability of the proposal (such as the reasonableness and financial viability of the estimated expenditure and the level of industry sponsorship); and

- (e) commercial viability of the proposed research project outcomes which enable the LHTRI to be operated on a self-sustaining and financing basis in the long-run.
- 17. Funding subsidy may be provided for all or part of the funding requested in an application.

Execution and Monitoring of the Subsidy Programme

- 18. The successful applicant institution(s) shall set up a robust governance structure for the respective LHTRI concerned to the satisfaction of the Government and bears the responsibility to follow the requirements as set out in the agreement signed with the Government and ensure the prudent use of public Each selected LHTRI is required to submit progress reports, audited accounts and other required supporting documents (e.g. proof showing receipt of funding) for approval regularly. The applicant institution(s) will closely monitor the implementation progress of each LHTRI and report to ITC. Funding will be disbursed having regard to the R&D progress and cash flow requirement of the LHTRI, as well as how far the contribution from the university and / or industry has been made. As the funding is provided on a matching basis, if the actual amount of university and / or industry contribution is less than that committed in the application, the funding from the Subsidy Programme will be reduced correspondingly and any disbursed fund shall be returned to the Government in excess. If the implementation progress and performance of the LHTRI is unsatisfactory or if it has breached any funding conditions, the Government reserves the right to cease to fund, terminate the agreement in severe case, and request the LHTRI to return any disbursed fund.
- 19. Each successful applicant institution and the respective LHTRI concerned shall execute in strict accordance with the agreement with the Government and approved proposal. Each selected LHTRI is also required to submit a final report and final audited accounts upon completion of the agreement.

Financial Implications

20. Subject to Members' support, we will seek the approval of the Finance Committee ("FC") of the Legislative Council to create a new non-recurrent commitment of \$6 billion under Head 155 Government Secretariat: Innovation and Technology Commission ("Head 155") for implementing the Subsidy Programme.

21. As mentioned in paragraph 16 above, ITC will set up a Secretariat to handle the administrative work related to the Subsidy Programme. It will include sufficient provision in the draft Estimates of the relevant financial years to meet the necessary expenditures.

Implementation Timetable

22. We plan to seek funding approval for the Subsidy Programme from the FC in 2024. We will set up the Secretariat and the Assessment Committee, and invite applications from the universities after funding approval is obtained.

Advice Sought

23. Members are invited to support the Government to seek the approval of FC to create a new non-recurrent commitment of \$6 billion under Head 155 for implementing the Subsidy Programme. Innovation, Technology and Industry Bureau and ITC will continue to closely liaise with stakeholders and refine the modus operandi of the Subsidy Programme as may be warranted.

Innovation, Technology and Industry Bureau Innovation and Technology Commission February 2024