

For discussion
on 26 January 2021

**Legislative Council
Panel on Commerce and Industry**

Global STEM Professorship

PURPOSE

The Chief Executive announced in the 2020 Policy Address that the Government would launch a Global STEM Professorship Scheme (“the Scheme”). This paper briefs Members and seeks their views on the Scheme.

BACKGROUND

2. Talent is a key component of promoting innovation and technology (“I&T”) development. The current-term Government has substantially increased funding for local postgraduate students and resources for nurturing technology talents and has continued to adopt a three-pronged approach of nurturing, retaining and attracting talent, with a view to expanding the local I&T talent pool through a variety of funding schemes¹ as well as enhancing the talent admission regime and support for startups. At the same time, in order to align with the promotion of technological advancement, not only do universities develop research focuses for strategic development, they also shoulder the responsibility to recruit outstanding research and development talents. The Innovation and Technology Bureau (“ITB”) and Education Bureau (“EDB”) will launch the Scheme to attract more world-renowned scholars to engage in I&T-related teaching and research activities in Hong Kong.

¹ The relevant funding schemes include the Research Talent Hub and STEM Internship Scheme under the Innovation and Technology Fund, the Postdoctoral Fellowship Scheme, Research Fellow Scheme and Senior Research Fellow Scheme of the Research Grants Committee and the Greater Bay Area Youth Employment Scheme launched by Labour and Welfare Bureau.

GLOBAL STEM PROFESSORSHIP SCHEME

3. The objective of the Scheme is to support the eight universities funded by the University Grants Committee (“UGC”) in recruiting internationally renowned I&T scholars and their teams to work in Hong Kong by providing funding for the universities in order to offer more competitive remuneration package. This would aid the universities to scale new heights in teaching and research activities and to expand the I&T talent pool of Hong Kong. In the long run, the Scheme would also be conducive to building up the capacities of universities in commercialising and applying their research discoveries, to encourage technology and knowledge transfer so as to serve the community and spearhead I&T development in Hong Kong.

4. Subject to the nominations by the UGC-funded universities and endorsement by the Assessment Panel, each overseas scholar who relocates to Hong Kong will receive subsidy for at most five years. Up to 100 professorships can be awarded in five years. In addition to internationally renowned scholars, the Scheme also aims to attract outstanding and promising junior scholars. Research teams who work for the scholars can also receive subsidy for at most three years. The Scheme is estimated to cost \$2 billion. The EDB will offer a non-recurrent subvention of \$500 million and the ITB will provide around \$500 million under the Research Talent Hub of the Innovation and Technology Fund. If needed, awarded scholars may receive additional funding to cover the costs of setting up laboratories, for which the Government will solicit donations. Other costs incurred by the Scheme will be borne by the relevant universities.

Funding Scope

5. The funding scope will cover remuneration of the awarded scholars, subsidy for the research teams and costs of setting up laboratories and initial operation. The scope and source of subsidy are as follows –

- (i) *Remuneration of the scholars*: the EDB will provide subsidy capped at 50% of the actual remuneration offered by the university to the awarded scholars, subject to a ceiling of \$1 million, i.e. a total commitment of \$5 million for each professorship. The remainder will be borne by the universities. The universities can provide a better remuneration package and/ or other fringe benefits with their

own resources as they see fit to better attract overseas scholars.

- (ii) *Subsidy for research teams*: the Scheme welcomes the awarded scholars to bring their research teams to Hong Kong. The ITB will provide subsidy for the recruitment of up to four research team members for the initial three years. The level of subsidy is on par with that of the Research Talent Hub, with a current funding level of \$32,000 per month for PhD holders. Universities will bear the costs of the four research team members in the fourth and fifth year as well as that of other research team members.
- (iii) *Subsidy for setting up laboratories*: Depending on the academic disciplines and research plans of individual awarded scholars, the awarded scholars may request subsidy for setting up laboratories. The Government will solicit private donations, subject to the support given by the Assessment Panel. The universities will have to provide the space for laboratories and may top up funding for setting up laboratories. They are also responsible for the costs of ongoing operation and development of the laboratories.

Research Areas

6. Research areas of eligible I&T scholars include but are not limited to the following –

- (i) Natural Sciences (e.g. physics, chemistry, biochemistry, etc.)
- (ii) Applied Sciences (e.g. food science, environmental science, materials science, etc.)
- (iii) Medical and Healthcare Sciences (e.g. new medicines/ treatments/ diagnostic methods, etc.)
- (iv) Engineering (e.g. civil, electrical, mechanical, electronics and optical engineering, robotics, precision engineering, etc.)
- (v) Mathematics (e.g. data science, artificial intelligence, etc.)

- (vi) Information and Communications Technology (e.g. communications technology, cybersecurity, internet-of-things, etc.)
- (vii) Arts Technology (e.g. digital entertainment)
- (viii) Gerontechnology (e.g. personal hygiene assistive devices, injury prevention technologies, etc.)

Assessment Arrangements

7. The Assessment Panel will be appointed by the Government, comprising individuals from the technology sector, academics, professionals, the Government's representatives, etc. It will be responsible for vetting nominations and deciding the amount of subsidy.

8. Universities will recruit scholars through their existing channels and submit their nominations for the Assessment Panel's consideration. There is no upper limit on the number of nominations by each university. Universities must indicate the remuneration package to be offered to the scholars (including salary, fringe benefits, accommodation, etc.) and make sure that the scholars have agreed in principle to work in Hong Kong. To ensure the early arrival of scholars to Hong Kong, there will not be a quota on the number of professorships to be awarded each year.

9. The Assessment Panel will adopt a merit-based approach in considering the universities' nominations. A set of stringent and objective assessment criteria will be developed by the Assessment Panel to determine the suitability of the candidates, making reference to their experiences, research capability, achievements, as well as their intended research areas, research plans, potential impact and plans for knowledge transfer, etc.

10. If the universities are interested in applying for the subsidy for setting up laboratories, they need to submit the lab proposal and academic/non-academic impact of the research project along with their nominations. The ITB will provide technical advice on the lab proposals, including whether the requested equipment and renovation for the laboratories commensurate with the relevant research areas, and whether the cost level is reasonable, to the Assessment Panel for assessment.

Monitoring

11. Under the Scheme, different parts of the subsidy as stated in paragraph 5 will be subject to a cap to ensure proper use of funds. The awarded scholars will be employed by the relevant UGC-funded universities. Following established practice, appointment, promotion and retirement of academic staff is a matter within the autonomy of the universities, and the Government and UGC are not involved. The universities will continue to appraise the scholars' performance in accordance with their prevailing personnel management practices.

12. The universities are required to submit annual reports, which comprise the performance appraisal of awarded scholars and the progress of using the subsidy, to the Assessment Panel. If necessary, the subsidy granted to individual scholars/ research team members can be terminated and all remaining subsidy can be clawed back.

NEXT STEPS

13. The ITB and EDB have been exchanging views with the universities in the past few months. We aim to finalise details of the Scheme, appoint the Assessment Panel, determine the modus operandi of the Scheme with the relevant stakeholders and brief the universities on the Scheme in the first quarter of 2021. It is expected that the universities can submit nominations to the Assessment Panel from June 2021.

ADVICE SOUGHT

14. Members are invited to note the implementation arrangements for and offer views on the Global STEM Professorship Scheme.

**Innovation and Technology Bureau
Education Bureau
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