Interview: Cecilia Pang Wai-bing – Biotechnology Director, Innovation and Technology Commission (ITC), Hong Kong



"We were a latecomer to the industry because we do not have a large pharma industry base, but we are very strong in academic research, especially in biomedical and clinical research."

21.07.2017

Tags: Hong Kong, ITC, Innovation, Technology, Hub, Investment

Dr. Cecilia Pang, Biotechnology Director of the Hong Kong SAR Government's Innovation and Technology Commission (ITC), discusses ITC's mandate to develop the necessary infrastructure in order to foster Hong Kong's innovation and technology environment, the increasing importance and relevance of the life sciences sector to Hong Kong, and the strengths of Hong Kong in terms of becoming a life sciences innovation hub.

To begin with, can you briefly comment on the overall mandate of the Innovation and Technology Commission (ITC)?

The Commission was first established in 2000 and is now under the Innovation and Technology Bureau (ITB), which was established in 2015. The ITB is responsible for policy matters and we are its executive arm. Two of our major responsibilities are: firstly, to provide funding for a variety of programs designed to foster Hong Kong's innovation and technology environment, and secondly, to develop the necessary infrastructure for that to take place.

For the first objective, the Hong Kong SAR government established the Innovation and Technology Fund (ITF) with an initial injection of HKD 5 billion in 1999, topping it up with another HKD 5 billion in 2015. We administer this fund, which is one of the several existing sources of major government funding for technology research. ITF is dedicated to supporting applied research and development.

The other two major government funding sources for research are the Research Grants Council (RGC) under the University Grants Committee, which provides funding for academic research, and the Health and Medical Research Fund (HMRF) under the Food and Health Bureau, which funds research into medical and health services.

For the second objective, we have established a number of R&D institutes and entities, most notably, the Hong Kong Science and Technology Parks Corporation (HKSTP), as well as the Applied Science and Technology Research Institute (ASTRI). These now function independently with their own executive board, mission and focus.

In addition to funding and infrastructure, we also promote collaboration in science and technology at the government level. For instance, with the Mainland, we have official collaboration frameworks with the Ministry of Science and Technology, and joint funding schemes with the Guangdong and Shenzhen departments of Science and Technology. Internationally, we collaborate with the Consulate-Generals of various governments to promote bilateral scientific and technology exchanges.

We currently have over 250 people, having expanded quite rapidly over the past 12 months.

Can you tell us more about the various funding programs available under ITF?

The ITF has a portfolio of funding programs designed for different stakeholders. For instance, we have an Innovation and Technology Support Program (ITSP) for supporting applied research mainly conducted by universities; the University-Industry Collaboration Program which promotes collaboration between universities and industry; the Enterprise Support Scheme (ESS) for supporting companies' in-house research; and the General Support Program (GSP) to support non-R&D activities like conferences. This year, we have launched a new funding program, the Midstream Research Program (MRP), to encourage universities to conduct more midstream research projects in key technology areas and a new Technology Voucher Program (TVP) to support technology companies, especially small- and medium-sized enterprises, to use technological services to improve productivity or upgrade business processes.

[Featured_in]

This range of initiatives we offer is very comprehensive; we support technology companies of different sizes and at different stages of research and development.

How important is the biotech and life sciences sector to the Commission's work?

The Commission has different technical teams looking after five different technology areas: biotech and environmental technology, electronics, IT, new materials, and foundation industries. In terms of funding, the IT area gets the largest share; biotech is usually around 10 to 20 percent of the total. Although not the largest, it is definitely a very important part of our efforts. Furthermore, biotech is now becoming very multidisciplinary. Many projects that involve non-biochemical elements such as IT and engineering might have been classified under other technology areas, so in reality the overall sector is bigger than what the funding figures suggest.

Broadly, our life science sector covers pharmaceutical, medical devices and technologies, and Chinese medicines.

These areas are important to Hong Kong not only because of their economic value but because their applications can lead to better healthcare and living for our people.

Hong Kong is not the only country in the region looking to become an innovation and technology hub, especially for the life sciences. What would you say are Hong Kong's relative strengths and weaknesses in this respect?

We were a latecomer to the industry because we do not have a large pharma industry base, but we are very strong in academic research, especially in biomedical and clinical research. A lot of groundbreaking work is being undertaken in areas like molecular diagnostics and new medical treatments. For drug development, our strength is in the earlier-stage of R&D, but some projects are now progressing into the midstream, which is why the Commission is very keen to encourage academia-industry collaboration to facilitate their realization.

Most of the academics in Hong Kong have been educated or worked overseas and possess a very strong international network. We also have many research students from the Mainland, who are attracted to Hong Kong's academic reputation and international exposure. We are also known for compliance with international standards.

[related_story]

Chinese companies are very interested in increasing their presence in Hong Kong because they see Hong Kong as a valuable platform to establish relationships with both Hong Kong and international scientific communities. Some Chinese companies are setting up medical services and clinics here to serve clients from the Mainland. The brand reputation of Hong Kong is very robust in this respect. Similarly, overseas companies may come to Hong Kong for proximity to the China market. We are the "super-connector" between the Mainland China and the rest of the world.

On the other hand, I think we can do more to encourage more collaboration. The technology in this sector is developing at such a rapid pace that it is difficult for companies or researchers to do everything on their own. The good news is that there are many CROs and CMOs that companies can collaborate with. There are also a lot of resources in the Mainland that Hong Kong can leverage on. The HKU-Shenzhen Hospital is a good example of how we can tap into and benefit from each other's resources.

Having been with ITC for over a decade now, what are some of the highlights for you?

I am very grateful to have been able to contribute to the work of ITC and see how the industry has developed in Hong Kong during these years. The amount and standard of research have increased significantly and many projects are now closer to the commercialization stage. The R&D process, especially in the life science sector, takes time. I am pleased to see some of the work of ITC at the beginning come into fruition now.

I worked in industry prior to joining ITC. Joining the government has given me a broader perspective, as we have to consider issues from different angles and take into account the interests of multiple stakeholders.

I truly believe that Hong Kong is a very open-minded, flexible and competitive location for biotech and life sciences innovation and development. We have a strong legal system, robust regulatory and compliance frameworks, and transparent processes. We are a ready adopter of new technology and we can play a very important role as a harmonizer between international and Chinese standards. ITC is committed to realizing the potential that Hong Kong has in this sector.

See more interviews