Albert Wong – CEO, Hong Kong Science and Technology Parks Corporation



We are open for business and want to bring the best people, best companies, and best investors into Hong Kong

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Albert Wong of the Hong Kong Science and Technology Parks Corporation (HKSTP) outlines how Hong Kong has developed as an innovation hub, building on its established areas of finance and trading. Wong also discusses the importance of life science companies with HKSTP's portfolio, the challenges of talent attraction, and the importance of Hong Kong's connectivity with mainland China.



What have been the major transformational milestones during your seven-year tenure as CEO of the HKSTP?

HKSTP has a real focus on research and development. We require all companies joining HKSTP to have at least 50 percent of their activities in R&D, which is a key differentiator from other science parks, such as Shanghai and Cyberport. That made life exceedingly difficult when we started and, as a result, occupancy was only about 40 percent back in 2016. Fanny Law Fan Chiu-fun, then a non-official member of the Executive Council of Hong Kong, was adamant about the importance of this 50 percent R&D level, which made things challenging, especially as despite some perks from the government, our spaces are not cheap to rent, but with time that strategy has proven to be the right one. We are now at 90 percent occupancy thanks to our diligence in only admitting tenants with a significant focus on R&D activities.

After the hard work in the first few years, people wanted to come into the science park because they saw the HKSTP address on a business card as a guarantee that the company was truly engaged in R&D. We are very proud of the ecosystem we have created and how people interact within it. Hong Kong's R&D budget is less than one percent of GDP, and that is why I think Fanny Law and the HKSTP did the right thing; we are not a real estate project and are willing to sacrifice some income to drive R&D.

We also set up some communal facilities to serve the research community of Hong Kong as a centralised resource. On the biotechnology front, we collaborated with the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK) to set up a Good Manufacturing Practice (GMP)-accredited cell therapy laboratory and a GMP centre for advanced therapeutic products respectively to support research on advanced therapeutic products. We are also expanding the Biobank to facilitate biomedical research through access to high-quality samples in academic and commercial institutions. On the microelectronic front, there is a Sensor Packaging and Integration Laboratory (Sensor Lab) to support full research and development processes of micro/nano sensors and associated devices. We also have labs to support robotics-related projects and virtual labs with trusted environments to do experiments and innovate.

How does HKSTP go about choosing in which research equipment to invest, especially given that the park is pursuing a relatively sector agnostic strategy?

I have a team of experts for this purpose as keeping up to date with the latest equipment can be challenging. Communal facilities are the core of what we offer, so we need to follow the latest developments.

We have also built up our animal testing facilities within the science park and commissioned our Drug Safety Testing Centre in May 2022, providing about 2,000 m2 of space for drug testing and analysis. The maximum capacity of the lab is 12,000 rodents. We are already operating at GLP standard and are in the process of applying for GLP accreditation.

In the past five or six years we have significantly expanded our incubation programs and are currently hosting about 800 start-ups. We have a two-year Acceleration Programme, a three-year Elite Programme, as well as a new four-year program called Incu-Bio. Typically, biomedical companies need a lot of support in terms of funding for regulatory affairs among other things, and our fund for this stands at a maximum of HKD six million.

In the core incubation program, we have around 400 companies, 60 of which are biomedical companies in Incu-bio, and the rest are IT and electronics companies. Two or three years ago, we also started a pre incubation program. This means that any university student with an idea for a company can receive HKD 100,000 from us. They work with us for six months to a year. After that time, if they do not feel confident, they can go back to studying, no questions asked. That is the ideation stage, and I want them to go on to try and start the company through our incubation program. There are 200 teams doing this today and we have been very successful in encouraging many youngsters to start their dream. However, the conversion rate from ideation to incubation is only 20 percent.

Despite being a financial centre, logistics hub, and home to profitable real estate, Hong Kong lacks a tradition of home-grown venture capital deploying funds towards potentially risky innovation in areas like biotech. How much of a challenge is this?

This is one of the reasons for the existence of science parks. Hong Kong is not known for technology innovation, but as a financial hub as well as for tourism and logistics. That is why we have to do a lot to encourage people to join. But in Hong Kong, we have exceptionally good universities – with five of them ranked among the global Top 100. Hong Kong and London are the only two cities able to boast so many strong universities. We have world class researchers, but research does not get you anywhere on its own. Our job is not so much about competing with the universities, but rather to help the universities bring out and commercialize the products of their research. My background is in commercialization, so this is a passionate mission.

About five years ago we started engaging a lot of investors and VCs. I told the government that although they had put a lot of money into technology, the main investment should come from the

private sector. We have established a ‘sales side’ team which acts like investment bankers and represents 1,000 companies in the science park looking for investors. Currently, we have actively engaged with more than 1,000 different investors, around half of which are local, and half from overseas or from mainland China.

Despite Hong Kong’s positioning as the financial centre of Asia and its strength in property and institutional investment, the VC culture here is still at an early stage. The many family offices that exist tend to be risk averse and have traditionally not engaged in early-stage or high-risk investment. Therefore, we have had to help these investors better understand these kinds of investments and channel greater amounts of capital flows towards early-stage innovative companies.

A new budget has been put in place for innovation and technology under the *Hong Kong Innovation & Technology Development Blueprint* and Hong Kong companies are being encouraged to look at the mainland Chinese market. Is this a trend you are observing when start-ups or bioventures in Hong Kong are developing their businesses?

Doing business in Mainland China is always difficult. Also, all the startups in the science park, if they say their market is Hong Kong, I tell them not to do it. Because Hong Kong is so small. I advise them to go outside of Hong Kong, to China, the Greater Bay Area, Southeast Asia, Europe, or the US. You have to start here but expand outside of Hong Kong. I would not necessarily tell them to go to China because it is always difficult.

We are setting up a new branch in Shenzhen, opening in the next few weeks. So, we do help them expand their businesses in China, but also help them to expand to places like Southeast Asia, Singapore, Malaysia, and Thailand. I advise them to go anywhere in the world. China is a huge market; you cannot ignore it. But you have to learn how to do business in China.

Out of your portfolio of R&D companies, how does life science rank? What trends have you seen in terms of tenants, and the appetite for using the common facilities?

Out of the over 1300 companies in the Science Park, about 220 of them are life sciences, healthcare, or biomedical. Seven years ago, when I started, it was about 30. In our Incu-Bio program, when I joined, we had zero and now we have about 60. So, there is a lot of growth in the biotech area.

There is always a lot of interest in biomedical or healthcare related research in Hong Kong, but not so much in development. As I said, there are many good universities, professors, and scientists in the universities, but they are very focused on writing papers. They did not consider commercialization, because they thought it was too much money, and they only wanted to focus on research.

However, with government encouragement and hearing of some successful cases like Professor Dennis Lo and some medical device start-ups, people began to think about commercialization. Also, with the Incu-Bio program, Chapter 18A (Hong Kong Stock Exchange pre-revenue listing option for biotechs), and some of the government funding, people are starting to think about biotech development, not just research. Although many professional scientists are still in the lab. The environment is now more conducive than ever to encouraging scientists and professors to think more about downstream commercialization.

More and more new technologies, including stem cells, are being commercialized. Nowadays stem cells are being applied in many places. Also, the pandemic affected a lot of startups; but the number of companies in the science park actually grew during this period. Many companies failed, but many came up with new ideas. In different circumstances, people think their lab research may find a commercialization angle. That is why a lot of people are trying. We are also attracting people from overseas to come to Hong Kong to leverage the university system and there is government funding to expand it.

How difficult is it to attract people to Hong Kong from overseas?

It is not easy. I recently attended the JP Morgan conference in San Francisco, and the people I spoke to were sceptical, and careful because the US-China relationship is still difficult. But people are still always thinking about it as a huge market; 1.4 billion is a lot of people.

One of the reasons why Hong Kong is attractive is because you are in China, but you are not really in China. In 2018, the government put up HKD 10 billion for the InnoHK Initiative. They give this money to local research and non-profit research in the areas of healthcare or Artificial Intelligence (AI) and robotics. They want local scientists to partner with global scientists to do the research in Hong Kong. They have to be doing research in the Science Park, not in the universities.

So, HKD10 billion between 28 of these institutes is substantial. We have the Harvard School of Engineering pairing with the HKU on advanced biomedical instrument research, as well as Professor

Nancy Ip at the Hong Kong University of Science and Technology (HKUST) doing research on neurodegenerative diseases in partnership with Stanford and University College London (UCL). Moreover, the Royal College of Art is partnering with the Hong Kong Polytechnic University (PolyU) on AI research. Every one of them is here at the Hong Kong Science Park. That is why you see a lot of foreigners in Science Park because these are all funded by the government.

When you are a researcher, you are not a business, and if you are doing stem cell research the barriers are so high. Professor Pengtao Liu from the University of Hong Kong is doing world-class stem cell research partnering with Cambridge but doing the research here. I do not know if I can commercialize it, but I will help them.

What is on the agenda for you in the next two or three years?

One; we need to do more around early-stage investor education and bring more investors in. We are not quite there yet. Although we have a HKD one billion VC fund, it is still not big enough; we need to expand the investor network. We need investors to help these Hong Kong scientists, not just the government.

Two; we need to expand the number of companies in the Science Park. We have laid a good foundation in the past five or six years. As well as our 1300 in the Science Park we have about 5000 technology companies in Hong Kong. I think the most important thing is to expand this from 5000 companies to 20,000 companies.

Three; we need to bring in talent from all over the world. At any one time in the Science Park, we have at least 1000 job openings in R&D. We need to help the local youngsters to get into R&D. But it is equally important to help bring in talent from all over the world.

Are you building a residency program to facilitate that?

We will have this kind of support to bring resident scientists to Hong Kong. At the end of the day, what we need to do is make this a hub of talent, not just technology. If you do not have people or talent, you cannot have a technology hub.

Of those three, I believe that people are the most important. I am going to Singapore and Malaysia next week to recruit people. I will ask them to come to Hong Kong, I will help them subsidize their living expenses and help them with their visa.

I will probably go to the UK and the US East and West Coast, to recruit Chinese to come back. So I am trying many new things.

Would you like to send a particular message to biopharma sponsors?

The Hong Kong that you saw in the past as a financial hub is still there. Although you may not think of Hong Kong as a technology hub, we will change. The government, both the mainland Chinese and the Hong Kong governments are putting a lot of resources into this. We are open for business and want to bring the best people, best companies, and best investors into Hong Kong. We have a certain role that we can play, IP protection, connection to the rest of the world, and research capabilities. We have made a lot of difference in the seven years, and there will be more to come. This big plan will be happening.

There is a lot of talk in the West that the 'One Country Two Systems' principle no longer holds the same weight and that Hong Kong's unique positioning is under threat. Do you have a comment on that?

I was born in Hong Kong; I am 100 percent a local. I think the 'One Country Two Systems' principle is very important to both Mainland China and Hong Kong. While there were some challenges in 2019 with the protests, Hong Kong can only be successful only if we become part of China while retaining our different system. It is written in the Chinese government's five year plan that Hong Kong has to be the country's international hub. Within the 'One Country, Two Systems' principle, Hong Kong will remain distinct.

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