



# A LAUNCHPAD FOR BIOTECH AMBITIONS

Committed to innovation and entrepreneurship, **HONG KONG SCIENCE AND TECHNOLOGY PARKS CORPORATION** provides comprehensive value-added services and harnesses strategic partnerships to help translate high-value biomedical research into revolutionary diagnostic tools and treatments.

## **Renowned as a top international city**

Hong Kong has been a strategic meeting point for new capital, talent and ideas. The city's largest R&D base, Hong Kong Science and Technology Parks Corporation (HKSTP), unites innovators in biomedical technology to advance solutions including advanced therapeutics, pharmaceuticals, diagnostics, medical devices, and more.

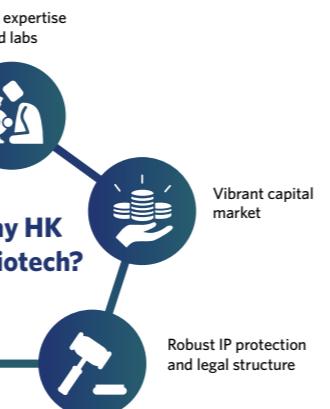
"Asia-Pacific is expected to become one of the biggest biomedicine markets in the world, and Hong Kong is poised to be an international biotechnology hub. The city has become the world's second largest biotech IPO market," says the head of HKSTP's biomedical technology cluster, W. John Kao. "Hong Kong Science Park is home to 900 technology companies. Over the past five years, the number of biotechnology companies has grown from 30 to

150, while they have access to our world-class shared facilities and support services to conceptualize, test, and commercialize biomedical innovations, addressing medical needs, and promoting healthy living," he says.

"Recognizing that biomedical start-ups require additional support, our Incu-Bio programme provides R&D funding and business support services for them to develop life-changing solutions," Kao adds.

## **Fostering exemplary research**

Three million people around the world have chronic spinal cord injuries but only 600,000 cord blood mononuclear cell units are stored in public cord blood banks worldwide, says Wise Young, a spinal cord injury expert and the chairman at Mononuclear Therapeutics Limited, a partner company of HKSTP. "We aim to meet the highest



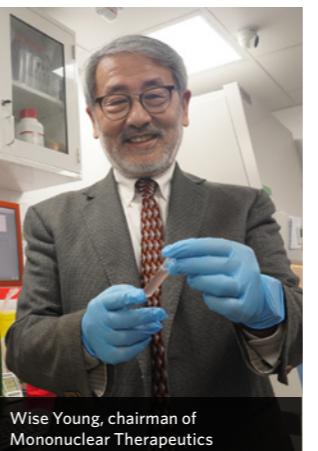
Last year, the company earned an AABB (formerly known as American Association of Blood Banks) accreditation for its first public cord blood mononuclear cell bank in Hong Kong. It collects and processes cord blood cells to support R&D for cellular therapeutics of spinal cord injuries, stroke and macular degeneration. "We started Hong Kong's first

standards of cellular therapy globally and treat neurological diseases," says Young. "HKSTP supports our mission by offering advice on different research phases, and by facilitating collaborations with local universities, hospitals and overseas institutes in pre-clinical and clinical trials."

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W. John Kao, head of biomedical technology cluster of HKSTP



Wise Young, chairman of Mononuclear Therapeutics



Victor Chan, CFO of ACT Genomics



Kunio Yamada, chairman and CEO of Rohto

public cord blood mononuclear cell bank as a model, and we are hoping that it will spread worldwide," Young says. "Hong Kong is an ideal place to set up a public cord blood bank. This city gives us access to a large pool of stem cells of Asian ethnic origins, to further develop suitable cellular therapeutics for the Asian populations around the world. I believe that research conceptualized and implemented in Hong Kong and the Greater Bay Area (GBA) with the support of the HKSTP can be a blueprint for the future."

Accessing cord blood cells harvested at public and private hospitals locally, rather than importing them from the United States, has lowered costs. HKSTP also provides the Good Manufacturing Practice (GMP) facilities that will help development of Advanced Therapy Products (ATP) to create impactful treatments in Hong Kong.

"There had been no GMP-certified facilities for producing ATP in Hong Kong for clinical trials or commercial manufacturing," says Kao. "With government funding and collaboration with universities, HKSTP envisions that the GMP facilities would provide a significant boost to the biotech ecosystem in Hong Kong."

**Investment support for biotech innovations**  
HKSTP also fuels business growth of technology companies by

connecting them with a network of more than a thousand angel investors, venture capitalists and private equity firms. Its corporate venture arm, HKSTP Ventures, makes direct investments into seed-to-Series A stage start-ups and co-invests with private investors.

ACT Genomics Holdings Co., Ltd, which provides cancer patients with personalized genomic information based treatment recommendations, opened a Next-Generation Sequencing (NGS) laboratory at Hong Kong Science Park in 2019. This Asian company also received funding from HKSTP Ventures to propel its research.

"We are honoured to be one of the companies funded by HKSTP Ventures," says Victor Chan, CFO of ACT Genomics. "HKSTP Ventures invests in companies with great potential and sits on our board as an observer providing insight on business strategy, expansion, and fundraising."

"Biotech is becoming a very promising pillar for Hong Kong given the Chinese market potential and increased research and investment by the government, universities and the private sector," says Chan. "Biotech companies with good technologies and products are well positioned to tap into Chinese and international investments in Hong Kong, and to get listed on the Hong Kong stock exchange."

On top of clinical services and research projects, its laboratory

at the Park can also serve pharmaceutical companies in areas such as biomarker discovery, drug development and clinical trials, allowing ACT Genomics to capture tremendous business opportunities going forward, not just in Hong Kong, but also other cities in the GBA. It is also building an Asian cancer genomics database with clinical value to address cancer types prevalent in Asian populations.

## **Tapping into Hong Kong's talent**

Spurred by innovations and investments in Asian biotechnology, and the rising regional demand for quality medical care, Hong Kong will take a leading role in both consumer businesses and biomedicine, according to Kunio Yamada, the chairman and CEO of Rohto Pharmaceutical Co.

Rohto, a manufacturer of pharmaceutical products and cosmetics based in Japan, established an R&D laboratory focusing on regenerative medicine at Hong Kong Science Park in 2019. "We chose to locate at Science Park due to its strong ecosystem that helps foreign companies navigate everything from the initial paperwork and the logistics of setting up a lab to the hiring process and access to key markets," says Yamada.

HKSTP continues to enhance R&D infrastructure support such as Biobank, Biomedical Informatics Platform, dedicated laboratories and working spaces that are open to the biotech community to encourage exchange of ideas and collaboration. ■

us tap into the local talent pool, given especially that Hong Kong is home to five of the world's top 100 universities," says Yamada. "Having such resources readily available means Rohto can dedicate time to research that will benefit people."

Yamada anticipates greater synergy will be created among biotechnology, artificial intelligence, data technology and manufacturing sectors in Hong Kong and the GBA.

Further strengthening the future of biotech is InnoHK, an initiative led by the Hong Kong government to develop the city as the hub for global research collaboration. The first two research clusters focusing on health-care technologies, artificial intelligence, and robotics will soon be set up at Hong Kong Science Park. They are designed to connect top-notch researchers from around the globe to conduct impactful collaborative research, and attract and nurture talent. It serves as a world-class platform for researchers to tap into the GBA opportunities.

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